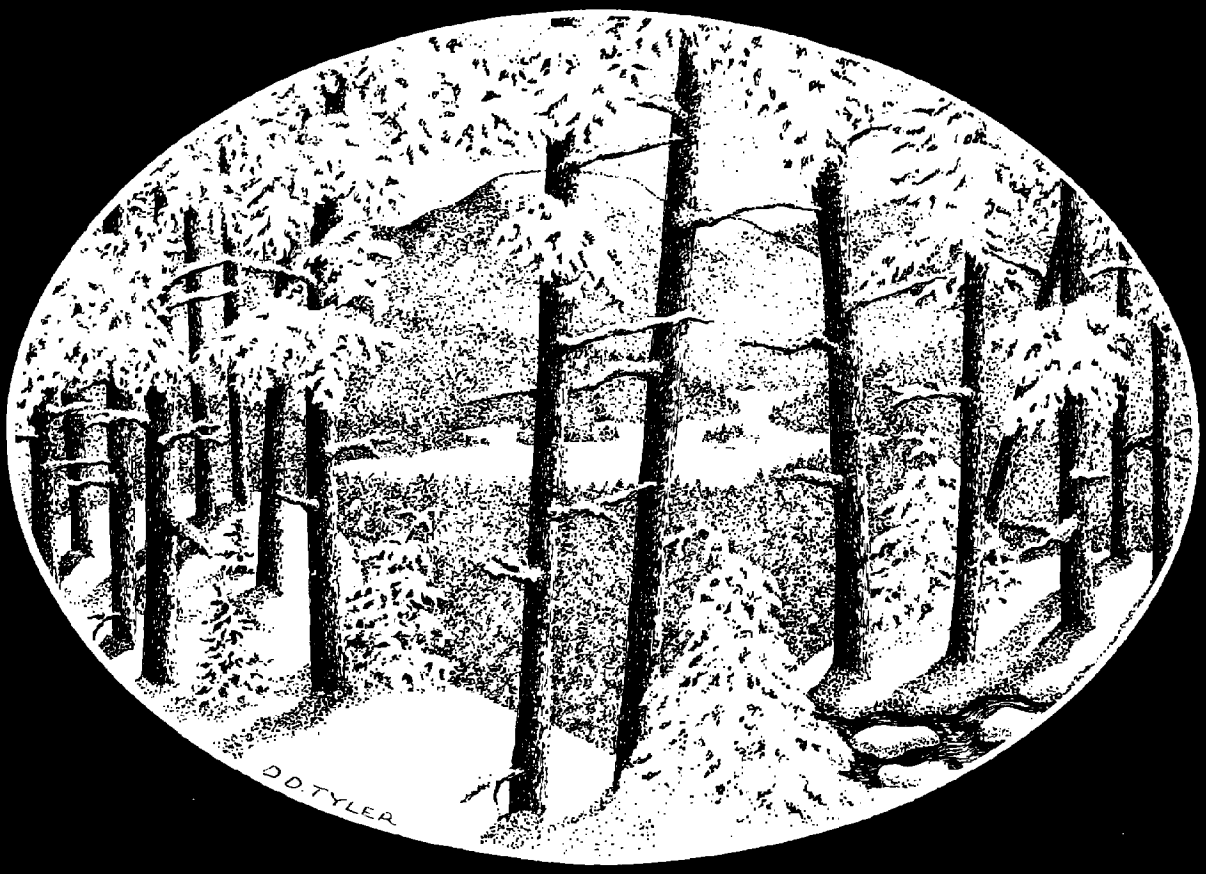
COMPREHENSIVE LAND USE PLAN

For the Plantations and Unorganized Townships of the State of Maine



Land Use Regulation Commission
Maine Department of Conservation

Maine has always been proud of its wildlands — the Big Woods, land of Indian and trapper, of white pine tall enough for masts on His Majesty's ships, of mountain lion, moose, and eagle. Much of the wildness was still there when Thoreau went in by birchbark canoe, a little over a century ago. And much of it remains. There is spruce and fir, moose and beaver, lake and mountain and whitewater enough to satisfy generations of Americans. More and more, as northeastern U.S. develops, the Maine woods are becoming an almost unparalleled resource, both for tree production and for recreational opportunity. But who is to come forward to say that this resource must not be squandered? Can we guarantee that the next generations will be able to set out a canoe and know that adventure is just around the bend?

"Report on the Wildlands"
State of Maine
Legislative Research Committee
Publication 104-1A..1969

"We think it a settled principle, growing out of the nature of well ordered civil society, that every holder of property, however absolute and unqualified may be his title, holds it under the implied liability that his use of it may be so regulated that it shall not be injurious to the equal enjoyment of others having an equal right to the enjoyment of their property, nor injurious to the rights of the community....All property is derived directly or indirectly from the government and held subject to those general regulations which are necessary for the common good and general welfare...Police regulations may forbid such a use and such modifications of private property as would prove injurious to the citizens generally. This is one of the benefits which men derive from associating in communities."

Opinion of the Justices of the
Supreme Judicial Court of Maine,
March 10, 1908

September 17 1976

Land Use Regulation Commission Members
Department of Conservation
State Office Building
Augusta, Maine

Dear Commissioners:

I wish to express my formal approval of the Land Use Regulation Commission's Comprehensive Land Use Plan for the unorganized townships of Maine.

I have reviewed the Plan in detail and am pleased with the sincere and thorough task which the Commission performed in its completion. I am satisfied that the comments made by the public in the lengthy review process were well considered and integrated in the Plan's final draft

I feel it is extremely important that the Commission and the Department of Conservation keep the major policies contained in the Plan clearly and specifically in mind when developing zoning standards and applying them in the zoning process. The overall direction established by the Plan will only be achieved through constant awareness of how individual zoning and licensing decisions affect the accomplishment of these major policies. I encourage the Commission to take this perspective and to strengthen the sensitive directions established by the Plan in your future actions

Sincerely,

James B Longley

JAMES B LONGLEY
Governor

COMPREHENSIVE LAND USE PLAN

For the Plantations and Unorganized Townships of the State of Maine

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Adopted by
the Maine Land Use Regulation Commission
August, 1976

Approved by
Governor James B. Longley
September 17, 1976

Acknowledgements

This Plan is the product of over two years work. During that time a number of people have contributed to its content through research, discussion, and analysis

This Final Draft Comprehensive Land Use Plan was written under the direction of Kenneth G. Stratton, Director of the Land Use Regulation Commission. It has been shaped and reviewed by the Board of Commissioners consisting of:

Malcolm Coulter, Chairman
Charles Blood — Mary McEvoy
Kenneth Cianchette — Robert Page
Sherwood Libby — Henry Saunders

Commission Staff most closely associated with the writing and production of the Plan are

Frederick W. Todd, Supervisor of Planning
Brian W.P. Kent, Planner (responsible for this document)
David C. Elliott, Research Associate
Alan J. Cox, Research Associate

The maps and graphics were drafted by Robert C. Clunie, Supervisor of Cartography, Bureau of Geology.

Legal assistance and thoughtful guidance was provided by Sarah Redfield, Assistant Attorney General.

Others on the staff who contributed include: Lewis Allen, James Connors, Thomas Radsky, Michael Barrett, Gloria LeVasseur, and Ginger McPherson.

The task of typing and retyping the many drafts of the Plan was shared by Brenda Gilbert and Cheryl Kelley, assisted by other typists on the Commission Staff and in the Bureau of Forestry.

Many others contributed towards this effort with constructive review and criticism, by writing letters, and by attending public hearings. We wish to thank them all.

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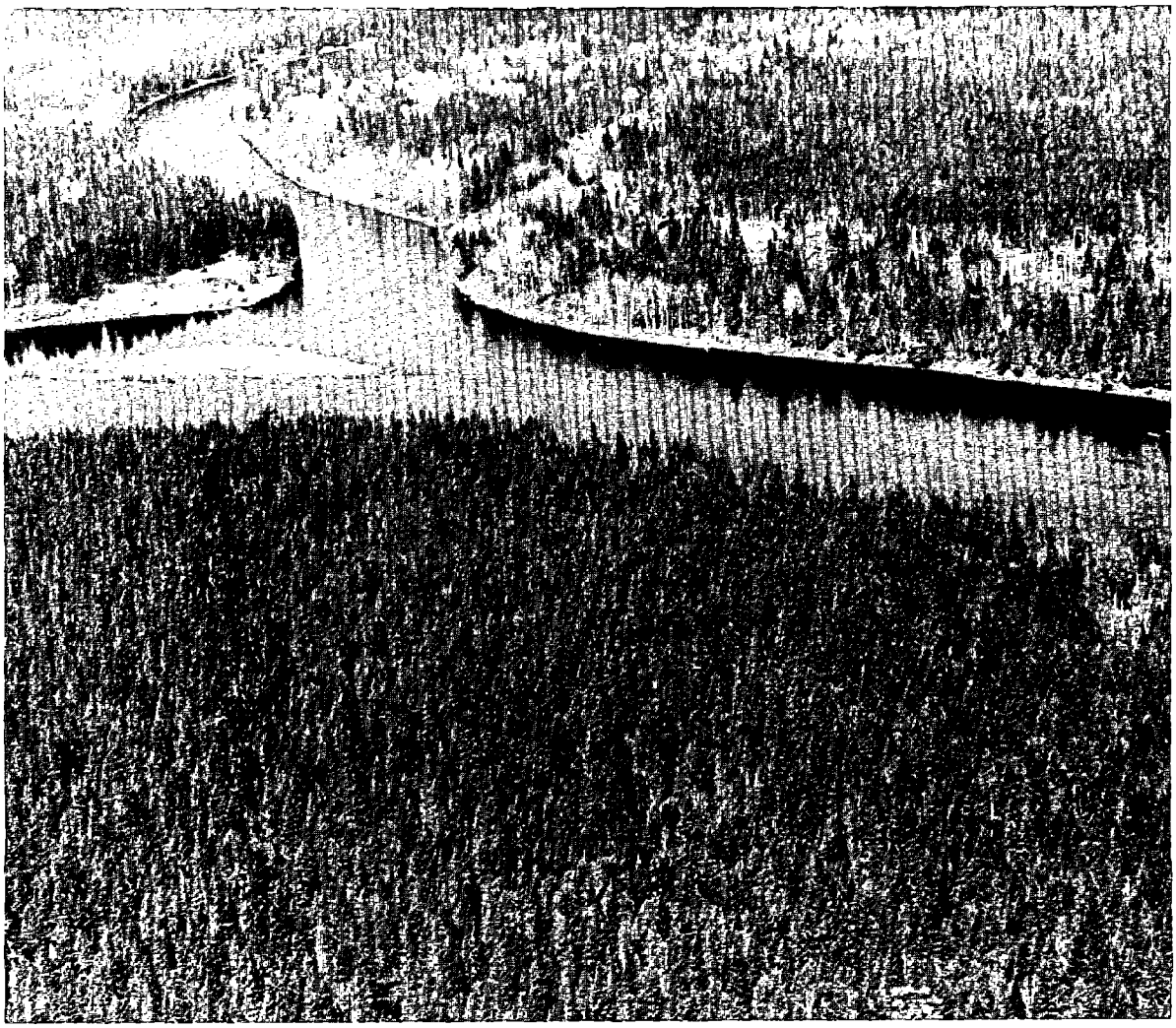


1 Summary

In 1969 the 104th Maine Legislature created the Maine Land Use Regulation Commission under M.R.S.A., Title 12, Chapter 206-A. The purpose was "... to extend principles of sound planning, zoning and subdivision control to the unorganized and deorganized townships of the State..."

A Comprehensive Land Use Plan was mandated by that legislation. According to the statute:

> Such plan shall guide the Commission in developing specific land use standards and delineating district boundaries and guiding development and generally fulfilling the purposes of this chapter.

Preparatory to the adoption of Permanent Land Use Standards and District Boundaries, the Land Use Regulation Commission has carried out its mission under temporary or Interim Standards and Districts. The Agency's role has been that of upgrading development, issuing permits based on the Statute, and protecting important resource values through interim zoning.

The primary purpose of the Comprehensive Land Use Plan is to provide the basis for the permanent zoning of Maine's unorganized townships. This Plan fulfills the requirements of the law.

The Comprehensive Land Use Plan sets out the objectives of the Land Use Regulation Commission. It establishes major policy statements and natural resource and development policies to achieve those objectives. It recommends land use districts designed to protect natural resources, support multiple-use management and guide growth toward existing developed areas. It suggests an implementation program and a timetable to achieve permanent zoning. Finally, it recommends a one-stop permit procedure for all regulated land use activity in the Commission's jurisdiction, as well as the location of some decision-making responsibility in regional Land Use Regulation Commission offices.

To attain its goal of balanced and proper land use the Commission's objectives will be to protect and enhance:

- the forest resource which dominates the character of the area;
- air and water quality;
- soil resources (including areas with fragile soils and steep slopes such as mountain areas);
- fish and wildlife habitat (including waterfowl areas, wetlands, and surface waters);
- resources and areas which offer significant outdoor recreational opportunities;
- the natural beauty of shorelands, scenic vistas and scenic areas;
- resources and areas of scientific and historic value (including historic buildings, structures, sites, objects and trails); and
- other resources identified as being rare, unique or endangered.

to promote:

- timber management in areas which are currently or potentially highly productive;
- agricultural management, particularly

in areas which are currently or potentially highly productive of crops.
- land use activities which promote working and living conditions desired by the people of Maine and follow desirable existing development patterns;
- the cooperation of private landowners in assisting the Commission to achieve the objectives of this Plan.

and to support:
- scientific management of timber resources in order to provide raw material for forest industries;
- land taxation which supports resource management and use which is in the best long term public interest;
- management of public land for a variety of public uses.

In reaching these objectives the Commission will assure that:
- the statutory provisions of the Land Use Regulation Law are effectively implemented
- the public costs for services to additional development do not exceed the public benefits, and
- there is on-going public participation and public access to information in the Commission's affairs.

Based on the charge of the Legislature and on its stated objectives, the Commission has established the following major policy statements to serve as a basis for regulatory decisions and as a basis for more specific land use standards and regulations.

The major policy is to:

Protect the natural resources by prohibiting those uses that will cause undue degradation to those resources, and that are not suitable in terms of social, economic, and cultural impact.

To achieve this the Commission will adopt Permanent Standards and establish and designate District Boundaries reflecting the following policies. The Commission will be guided by the order of the policies as listed below:

1. **Conserve the natural resources for timber production and outdoor recreation.**
2. **Support the management of all the various resources,** based on the principles of sound planning and consistent with principles of multiple use, to ensure the continual flow of products from forest and agricultural land and the continued availability of the area for timber production, outdoor recreation, and fish and wildlife habitat.
3. **Maintain the natural character of certain large areas to protect natural values and primitive recreation opportunities.** No development other than development associated with the primitive recreational experience, and timber management and harvesting shall be permitted therein. Such areas shall contain remote ponds, lakes, streams, trails, scenic locations, unusual features and other natural values that characterize the natural character of the unorganized areas.
4. **Establish suitable patterns of development.** To this end the Commission will:
   a. Encourage new development in existing developed areas,
   b. Promote orderly, balanced growth adjacent to these areas, and
   c. Allow well-planned development in other areas.

   Development will be permitted within appropriately zoned districts where the capability of the resources is not exceeded. Major development will be permitted only where (1) needed services are available or can be provided to support it without adverse public financial, social, or environmental costs, (2) the productivity of existing agricultural and forest land is not significantly lessened, (3) the opportunity for non-intensive recreation activities is not significantly diminished and (4) it is consistent with both local and regional values.
5. **Establish reasonable limits to growth** based on resource capabilities, existing conditions, the availability of public services, access, ownership patterns, tax considerations, and current and projected growth rates.

In addition to broad, major policies, the Commission has developed a number of more specific policies related to the protection of natural resources and to the location and quality of development. These are designed to guide the Commission in its decision making. These Natural Resource and Development Policies are found in Section 6 of this Plan.

The above policies provide guidelines for the implementation of this Plan. Together with the requirements of the Statute, they have been used to establish recommendations for land use districts and subdistricts. The following table lists those districts.

POLICY AND DISTRICT INTER-RELATIONSHIP

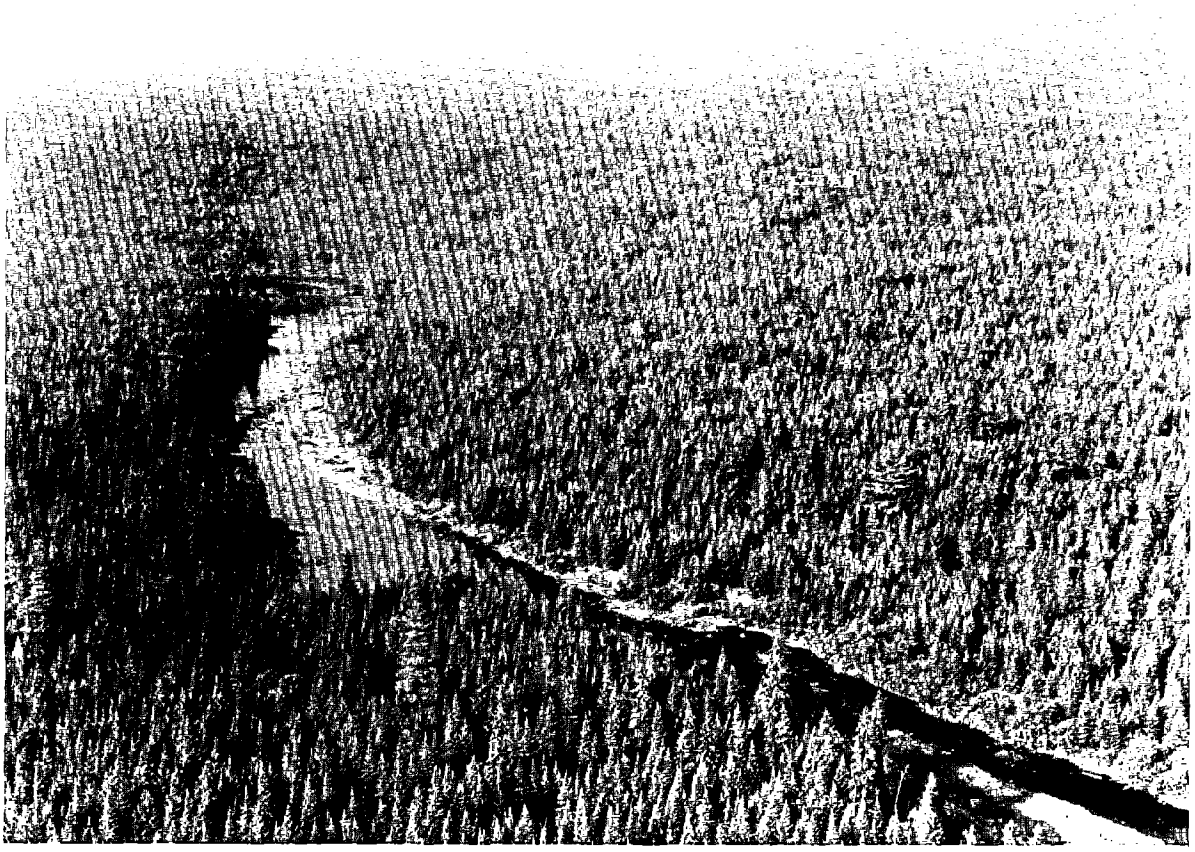
MAJOR POLICIES	NEW DISTRICTS	DEVELOPMENT POTENTIAL	NEED FOR PROTECTION
	PROTECTION		
Protect the Natural Resources	P-WL Wetland P-FP Flood Prone P-SG Soils and Geology P-RR Recreation P-MA Mountain Area P-FW Fish and Wildlife P-AR Aquifer Recharge P-UA Unusual Area P-SL Shoreland P-GP Great Pond P-RP Resource Plan	Limited development potential. Most building restricted to Shoreland and Great Pond subdistricts Other development regulated Forestry operations permit required, unless performance standards are met	Needs most protection because of hazards of flooding, erosion, sedimentation and potential harm to water quality, wildlife habitat and special recreational resources
	MANAGEMENT		
Support Multiple Land Use Management	M-HP Highly Productive	Forest and agricultural management related development permitted	Needs intermediate degree of protection to ensure resource continues to produce a sustained yield
	M-GN General	Low Density residential development permitted on large lots All forest and agricultural management permitted	
Maintain the Natural Character of Certain Large Areas	M-NC Natural Character	Forest and agricultural management related development permitted All other development limited and regulated	Needs high degree of protection to ensure conservation of natural character
	DEVELOPMENT		
Establish suitable patterns of development and limits to growth	D-GN General D-RS Residential D-CI Commercial/Industrial D-PD Planned Development	Any development permitted within limits of district and resource capability	Needs least protection because only those sites most suitable for development will be so zoned

The table summarizes the inter-relationships between the policies and the new sub-districts: it also shows that (broadly speaking) those resources in need of most protection are least tolerant of development; and that the areas most suitable for any development are less susceptible to environmental degradation.

Eleven Protection subdistricts are recommended. Ten of these subdistricts coincide with areas critical to the ecological balance of the region or with areas of recreational, historic or scientific significance. The eleventh subdistrict is the Resource Plan Subdistrict; it incorporates standards for evaluating individual management plan proposals, that meet the intent of one or more Protection subdistricts, and allows for their designation as a single subdistrict.

The three Management subdistricts support commercial forest product or agricultural uses and permit other development in varying degrees. The Highly Productive subdistrict is most restrictive of development not related to forest and agricultural management. Single residential units are permitted on large lots in the General Management subdistrict. The Natural Character subdistrict reserves large areas where forest management and timber harvesting are permitted, but other development is restricted to ensure the protection of the area's natural character and primitive recreation potential.

Four Development subdistricts allow for development activity in a broad range of circumstances. Three, the General, Commercial-Industrial, and Residential subdistricts, allow



new growth within and adjacent to them. The fourth subdistrict, named the Planned Development Subdistrict establishes standards and procedures by which the Commission can review and evaluate development proposals, in single ownership, that are distant from existing development and rely on a particular natural feature or location for their success.

The subdistricts serve as the basis for permanent zoning. Now that this Plan has been approved by the Governor, the Commission will consider regulations or standards that define the districts precisely and prescribe allowable land uses. These regulations will be scheduled for public review in October or November of 1976. After adoption of the regulations the districts will be mapped, and after public hearings, adopted. Mapping will proceed as expeditiously as possible commencing in March of 1977 and ending no later than May of 1979.

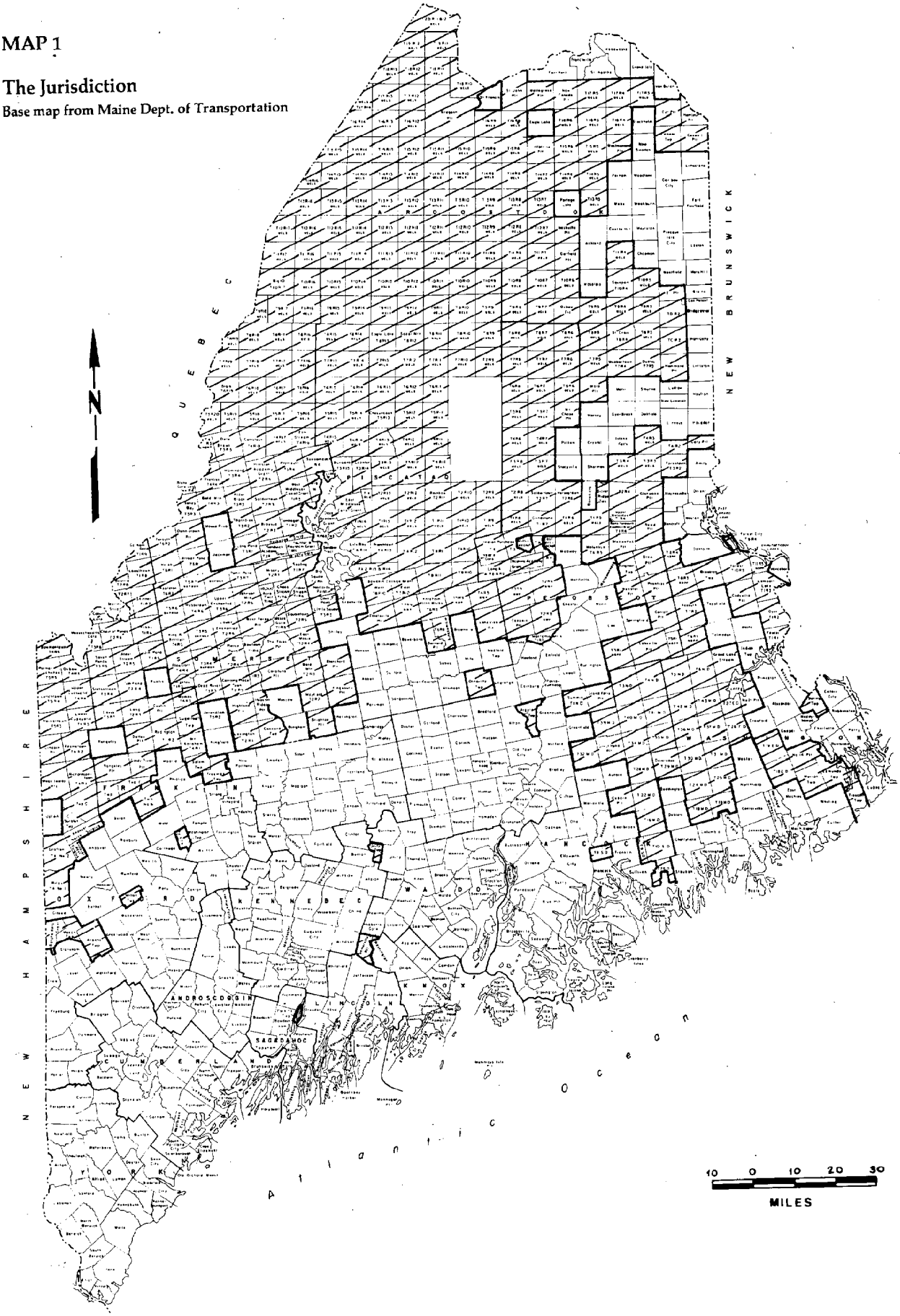
In addition to establishing new subdistricts, the Commission will seek to institute revisions in the permit process. To increase efficiency and service to the public, to the extent appropriations allow, regional offices will be permanently staffed and will have authority to process routine permits. The Commission will also seek to establish a one-stop permit review process that eliminates the need for the duplication of permits. In an on-going effort to improve its knowledge and functioning within its jurisdiction, the Commission will conduct a continuing program to inventory the resources, to provide assistance to land owners and to improve its own operating structure.

Public participation has been, and will continue to be, an integral part of the Comprehensive Planning effort. The "working draft" of this Plan was the subject of nine public hearings held throughout the State in June, 1976. Over 800 copies of the Plan were distributed and there was a total of 25 hours of hearings. Over 280 persons attended the hearings and 67 persons made statements. The Commission reviewed over 200 pages of written comment on the Plan, and revised it to reflect many of those public comments.

MAP 1

The Jurisdiction

Base map from Maine Dept. of Transportation



2 The Land Use Regulation Commission

Introduction

The Maine Land Use Regulation Commission's area of jurisdiction consists of 56 plantations, 407 unorganized townships and 116 coastal islands. Most of this area lies in northern Maine, is wooded, and is managed as a commercial forest. It contains about 10.5 million acres.

It is a quietly spectacular area of high mountains, vast forests, placid, cool lakes, and swift streams and rivers. It contains the headwaters of the State's major rivers and abounds with fish and wildlife. It is also a land of contrast — of woods and water, of cold, frozen, white winters and brief, hot summers. It was once the hunting ground of Indians and many of its features bear their fascinating names — Passadumkeag, Chemquasabamticook, Nesowadnehunk, Caucomgomac, Mooselookmeguntic, Chesuncook, Seboomook.

In the 18th century the white men came to cut the white pine. Later in the 1850's, spruce was harvested and only with the demand for pulp at the turn of the 20th century did fir become valuable. The early woodsmen, trappers and hunters took full advantage of the bountiful wildlife which continues to be a prime recreational resource. Today canoeists, hikers, mountaineers, and campers view the unorganized areas as a unique domain where they can go back in time to enjoy a natural world not unlike that enjoyed by generations before them.

The twentieth century has, nonetheless, changed some of this area. Timber has been cut and removed three and four times since logging began, and road construction for timber transport has provided access to much of the region. Between 6,000 and 7,000 miles of private roads exist today. Modern state and county roads cover many regions and human habitation has followed these routes. Some of the more accessible lakes have been ringed with camps and seasonal homes. Those who rely on the woods and the sparse agricultural lands for a livelihood have settled along the more important routes. Modern passenger vehicles have made ski resorts far from urban centers accessible and popular.

The increased accessibility and man's increasing affluence and leisure time caused a recreational building boom in the late 1960's. It was around this time that the people of Maine acted, through the Legislature, to form the Land Use Regulation Commission. On October 1, 1969, the first Land Use Regulation Law became effective. However, it was not until 1971 that the 105th Legislature extended the Commission's jurisdiction to its present boundaries. Since that time various changes in the legislation have been made, but the original purpose of the enabling legislation has remained the same.

That purpose is to extend the principles of planning and zoning into the unorganized areas; to preserve public health, safety and welfare; to ensure an ecological balance; and to encourage the well planned, multiple use of the natural resources.

The Statute creating the Land Use Regulation Commission mandated the establishment of interim land use classifications, districts and standards; formulated a permit process; and required that the Commission adopt an official Comprehensive Land Use Plan.

The Plan meets the mandate of the Statute by establishing policies and recommending new permanent districts that will guide development and act as a sound basis for specific land use standards and the delineation of district boundaries.

The Comprehensive Land Use Plan is a product of research, introspection and experience gained during the Commission's formative years. Many rough drafts have been compiled, revised in-house and reviewed by the public and other agencies. The Commission and its staff have attempted to find solutions to problems and to set new directions where they are required.

The Plan is organized to reflect the Commission's planning process, leading to building a case for the recommendations advocated in Section 7 and ending with a program that shows how the recommendations should be implemented.

Following this introduction is an overview of the Commission's responsibilities, a description of its area of jurisdiction, and a description of how the jurisdiction relates to the state as a whole. (Section 2).

Sections 3, 4, and 5 provide the basis for the policies and recommendations of Sections 6 and 7. Section 3 describes the day-to-day functions of the Commission staff and points out where improvement or innovation is due. It reviews the interim districts and standards and methods to ensure that available land use controls achieve the legislative purposes. Sections 4 and 5 utilize staff papers to describe the resources and give the rationale for their protection. Existing development and expected trends have also been evaluated to determine how to formulate future zoning and to guide growth.

The Comprehensive Land Use Plan reaffirms the purposes for which the Commission was founded. It shows that the Statute is basically sound, and in many ways unique; yet it recognizes that some of the criticisms levelled at the Commission during its formative period are valid and recommends appropriate changes.

The land use controls recommended are based on two fundamental premises. First, that the resources and natural character of the jurisdiction should be protected; and, second, that most new growth and development should occur in or near those areas which development exists, provided the resources can support it without degradation.

In summary, the Comprehensive Land Use Plan is designed to protect and conserve resource values and guide new development. The Maine woods are part of what the State stands for; they are more than the sum of their resources. Their values are social and aesthetic, as well as physical, biological and economic.

This Plan seeks to protect these values. It also seeks to permit development and resource use, provided they do not compromise the larger objective. In the end, the unorganized and deorganized townships are an essential part of Maine. Their spiritual and economic value should benefit all Maine people and future generations.

The Land Use Regulation Commission

The Land Use Regulation Commission's planning and zoning powers and development control extend over all of Maine's unorganized and deorganized townships, plantations, and unorganized coastal islands. (Map 1 depicts this area.)

A Commission, consisting of 7 public members appointed by the Governor is charged with implementing the Land Use Regulation law. The Commission members hold staggered four year terms. Four of the members must be knowledgeable in one of these fields; commerce and industry, fisheries and wildlife, forestry, and conservation. One of the members is elected annually as chairman, and no action may be taken unless approved by a vote of 4 members.

A director is appointed by the Commissioner of the Department of Conservation to carry out administrative and operational functions for the Commission. The director hires the staff deemed necessary to assist the Commission. The staff has three divisions: Planning, Resource Analysis and Development Review. Each Division performs one of the basic functions of the Land Use Regulation Commission: (1) comprehensive planning and establishing land use districts; (2) resource analysis and (3) issuing, with conditions, or denying permits for certain land use activities. Zoning is established through the use of land use districts.

Commission Jurisdiction

Coastal lowlands, river valleys, rolling hills, mountains and a northern plateau represent the varied physiographic regions of the Land Use Regulation Commission's jurisdiction; an area of about 16,500 square miles and larger than the states of Massachusetts, Connecticut and Rhode Island combined. It is the largest predominately undeveloped area in the eastern United States, and one of a few regions in the eastern United States where conservation of large areas of woodland is possible.

The almost total private ownership and the high percentage of large land management and pulp and paper company ownership and control represents a unique land tenure pattern. State ownership constitutes about ten percent of the total area. This includes 400,000 acres of Public Reserved land and over 22,000 acres of State Park land.

The outstanding feature of the area is its 9.25 million acres of forests. The dominant forest type is spruce-fir. Northern hardwoods, including maple, beech, and birch, comprise the second most abundant category. The forest is the state's most valuable natural resource and supplies much of the raw material for the State's wood using industries.

Five major river systems originate in the jurisdiction. They are the St. John, St. Croix, Penobscot, Kennebec, and Androscoggin. Lakes and ponds of an acre or more in size number 3,400, and comprise nearly 630,000 acres of surface water.

Most of Maine's mountains of more than 1,000 feet elevation are situated in the jurisdiction, including Sugarloaf, Old Speck, Crocker, Bigelow, Saddleback, and Mt. Abraham.

The area's recreational resources attract a sizeable seasonal population of about 32,000 persons in addition to 12,000 permanent residents. Residential development is concentrated in the plantations and those townships adjacent to the organized towns in the State. The unorganized townships are mainly private commercial forest lands used primarily for forest products. Employment in the area is primarily related to timber or recreation.

Historical Development

The earliest settlements in Maine were related to timber harvesting. Operations advanced eastward and northward from river to river; from the Saco to the Presumpscot, and on to the Kennebec, which allowed for the movement of timber from as far north as Moosehead Lake. The peak of the lumbering activity occurred on the Penobscot River during the most prosperous days of the 19th century. The city of Bangor, situated on this river, grew to become the greatest shipping port of pine lumber in the world by the mid-1800's. By 1861 the forest along the Penobscot was thinned as far north as Medway, and loggers followed the

river's fast East and West Branches deep into the wildlands still utilizing water for transporting the softwood harvest to the mills.

Throughout the 18th and 19th centuries, timber was transported primarily by water. Elaborate systems of dams, canals, and booms were devised to control and facilitate log movement. The final date for the use of the rivers to move timber is set for 1976.

Mechanization changed timber harvesting techniques in the early twentieth century. The ax was replaced by the chainsaw, tractors and skidders replaced the horse and ox, and roads became the thoroughfare favored over the rivers for the transportation of timber. The network of roads to move timber provided better access into the region, allowed more intensive management and utilization, provided better fire control and rendered the area available for other uses.

Land ownership in Maine has undergone a transition from large public ownership to nearly total private ownership. Prior to statehood, only nine million acres of the total 20 million acre public domain had been sold or granted to private parties by the state of Massachusetts. When Maine became a state in 1820, the remaining public lands were surveyed and divided equally between Maine and Massachusetts. In subsequent years Maine granted land for roads, railroads, schools and colleges, all in response to a growing population and a demand for more and better transportation for forest products. About the same time many individuals became aware of the importance of the timberlands; and in the 1830's the "land boom" began. This period saw lands in Maine quickly being transferred from public to private ownership. By 1847 almost all of the public lands in the State had been sold by Maine and Massachusetts, however, 1,000 acre public lots were reserved in each township.

The present pattern of land ownership resulted largely from the acquisition of large ownerships by the pulp and paper companies around the turn of the century. When wood became the raw material to produce paper, these lands were acquired to assure a constant supply.

In the nineteenth century the area was a valued recreational resource. The 20th century brought greater recreational demand as the possibilities for hunting and fishing had decreased in the heavily populated eastern United States, downhill skiing became popular, and lakeshores in populated portions of the country became highly developed.

The pattern of ownerships has restricted development to a large extent, but increasing population, increased leisure time, better road access, and the disappearance of desirable recreational resources elsewhere will continue to increase pressures in the area for recreation.

Regional Characteristics

Coincidences of history and geography and adverse soil and weather conditions account for the present undeveloped character of the Commission's jurisdiction. The westward movement, which swept across the country to the Pacific, by-passed this northeastern-most state. The settlement which did occur in the Northeast occurred along the Atlantic coast, the St. Lawrence, and inland along navigable rivers.

The Wesbter-Ashburton Treaty of 1842 ended the dispute known as the Aroostook War and delineated the Maine-Canada border as it is today. This political boundary halted settlement approaching from the St. Lawrence. Agricultural settlement in Quebec has advanced to the border between Maine and that Canadian province. The unorganized areas have retained an undeveloped character because they have been managed for timber for decades and because of a unique common and undivided ownership pattern. The purchase of large acreages by pulp and paper companies for an assured supply of raw material reserved the majority of the region for tree growth.

An inspection of the major highway systems in the Northeast reveals the lack of public roads within the Commission's jurisdiction. There is no major public throughway and the associated development which usually occurs along such roads. Nevertheless portions of the area are private road, constructed to transport lumber. (See Map 2).

The area's climate has been a factor in keeping the region undeveloped. A short growing season and the characteristically severe northern Maine winter probably has discouraged many from permanent settlement, as have the relatively poor soils.

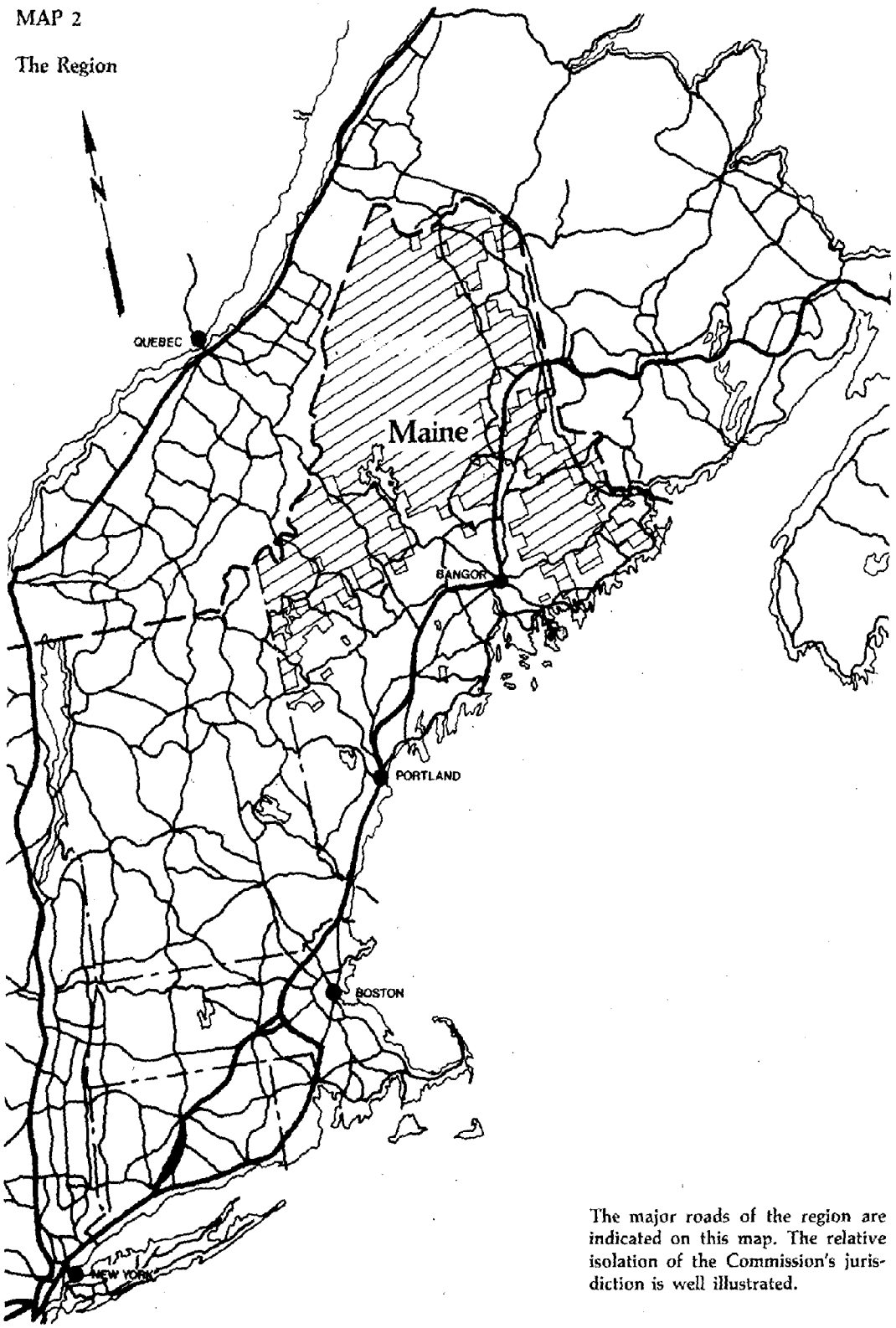
There is not a town within the area with a population of 1,000. Population centers that influence the jurisdiction are outside the area. This nation's largest urban region lies just to the south along the Atlantic coast, and the cities of Portland, Boston, Hartford and New York are within a day's drive.

Located on the fringe of the area are Rumford, Jay, Bucksport, Woodland, Millinocket and other Maine towns which house the State's paper producing firms and consume the spruce-fir timber so valuable for paper production. Sawmills and hardwood wood products manufacturing are also an essential part of the Maine economy. More than 200 million board feet of sawtimber are trucked to Canada each year, mostly from the northwestern portion of the State.

Historical developments, ownership, location, soil characteristics and climate all account for the undeveloped character of the area. These

MAP 2

The Region



The major roads of the region are indicated on this map. The relative isolation of the Commission's jurisdiction is well illustrated.

same factors have made the area valuable for timber and recreation.

The jurisdictional area of the Land Use Regulation Commission is important, regionally and nationally, as a relatively wild, natural area. Some argue that none of the jurisdiction meets the definition of wilderness because of land and timber management and recreational use. Depending on the level of forest management in the area, once harvested, a region is left to nature for anything from 10 to 80 years. Forest flora and fauna grow and live until the natural succession again produces tree growth of some economic value. Thus, although the area is not virgin forest, it is relatively inaccessible and it does have a natural character.

The area certainly has special attributes. Without the sources of pollution found in urban sections of the country, the unorganized areas still have high quality air and water. The absence of smokestacks and automobile exhaust have left the air fresh. Of the 281 miles of river in New England classified as clean enough to drink, 248 are in Maine and most is in the jurisdiction. The unorganized areas provide nesting sites and food and shelter for wildlife. The Maine woods is an important part of what the state stands for; Baxter Park, the Allagash Wilderness Waterway, Acadia National Park and the Maine coast would lose much of their meaning and value without the backdrop of the vast woodlands to the north.

After timber production, recreation is the unorganized areas most important use. Primitive, recreation, such as hiking, camping, fishing and hunting are very popular and are quite compatible with tree growth. Water related recreation and related shoreline development is increasing as such opportunities diminish in the organized areas of Maine and other parts of the Northeast. Development in relation to downhill skiing has been one of the larger components of growth in the west of the area in the recent past.

Primitive recreation areas must be large and not overused, or the delicate natural balance and the element of isolation, (their distinct features), will be lost. The preponderance of such remote acreage in North America is in the west and in Northern Canada. (See Map 3). The Maine woods is one area in the Northeastern United States along with some smaller areas in New York, Vermont and New Hampshire. which remain as islands of undeveloped land.

The regional importance of the unorganized area is for its timber, outdoor recreation and wildness. The inter-relationship of these uses requires careful planning and judicious control to resolve any substantial conflicts. Recreational development on shorelines and near downhill skiing areas will continue. Proper planning and guidance will minimize the impact on the timber resource and other values of the region. The opportunity before the Land Use Regulation Commission is to continue to prevent the intermixing of incompatible uses and to preserve ecological and natural values in one of the few remaining islands of undeveloped forestland in the northeastern United States.

Public Participation

Public participation in the formulation of this Comprehensive Land Use Plan has been extensive and has taken on a variety of forms. The Plan and early drafts have been the subject of public hearings, written comments and review at different times over the last two and a half years.

Much of this Plan is based on an earlier draft plan which was made available to the general public for review and comment in December 1974. Those comments are on file at the Commission office and were carefully considered by the staff prior to the writing of the *Working Draft* of which this final draft is a refinement.

The working draft of this Plan was completed and tentatively approved for distribution to the public by the Commission at the end of May, 1976. Nine hundred copies were printed; single copies were mailed to all the Regional Planning Commissions, members of the State Legislature, all those agencies that review permit applications for the Commission and to those members of the public on the Commission's mailing list. Notification of the publication of the Plan was given in ten newspapers across the State and all requests for copies of the Plan were honored.

During June, 1976, the Commission held nine public hearings; the Plan was distributed to those attending and verbally presented in outline form. Public testimony was then invited. The hearings were held in Fort Kent, Caribou, Orono, Augusta, Portland, Millinocket, Calais, Greenville and Rangeley. Questionnaires eliciting response to different issues in the Plan were distributed at the hearings.

The public hearings were attended by over 280 persons; 67 statements or questions were addressed to the Commission members and staff; altogether there were 25 hours of hearings.

Between June and July 14, 1976 fifty-two exhibits, consisting of written testimony and letters commenting on the Plan were received; this amounted to over 200 type-written pages of detailed and constructive criticism and comment.* The comments came from four general groups: landowners with extensive lands in productive forest, public interest groups, individuals, and

state agencies. Very little response came from the Regional Planning Commissions.

Approximately 300 questionnaires** were distributed and 30 were completed and returned to the Commission; the questionnaire asked individuals to respond to nine questions concerning the Plan. Overall there was strong support (± 80%) for the Plan's major recommendations.

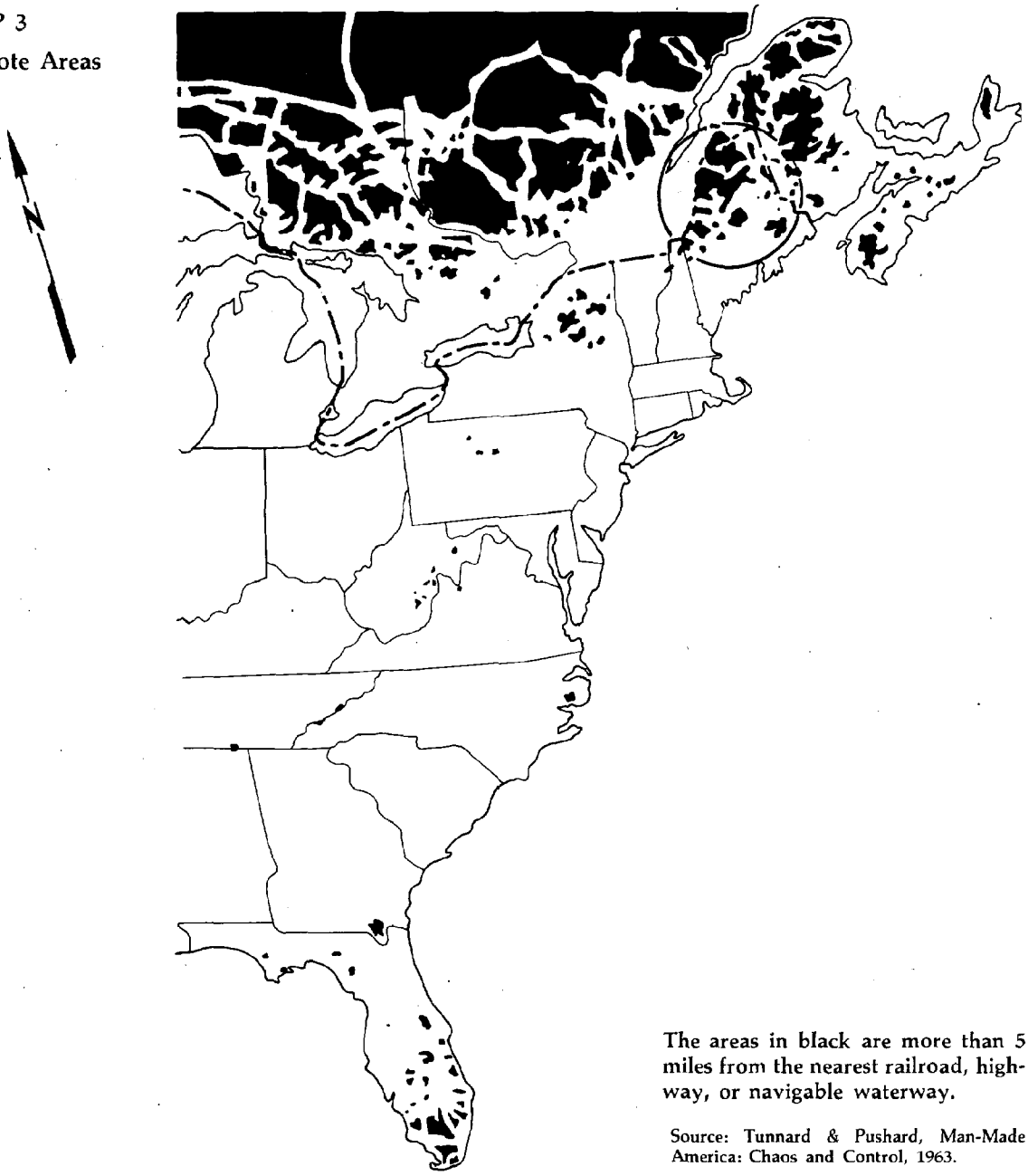
All of the comments, criticisms, suggestions and compliments on the working draft of the Plan were reviewed by the Commission members and staff. This final draft reflects many of the changes suggested by the public, the Commission's Citizen's Advisory Board and the Commission members themselves.

*All exhibits are on file at the Commission's office in Augusta and are available for public scrutiny during office hours.

**A sample questionnaire is contained in Appendix C, along with a summary of the results.

MAP 3

Remote Areas



The areas in black are more than 5 miles from the nearest railroad, highway, or navigable waterway.

Source: Tunnard & Pushard, Man-Made America: Chaos and Control, 1963.

3 Existing Land Use Controls

The Maine Land Use Regulation Commission is the primary agency responsible for planning for the proper use and for regulating land use in the unorganized areas. There are, nonetheless, approximately 20 other state and federal agencies, commissions, or boards with the authority to administer statutes dealing directly or indirectly with land use throughout the state.

A number of state and federal agencies exercise varying degrees of control over land-use in the Commission's jurisdiction. Some act as administrative bodies regulating public land; others regulate certain resources for the public good. Seen from a broad perspective (and despite some areas of overlap), the various goals of the agencies appear uniform. By and large they support the Commission's objectives. There is, however, room for improvement, especially in terms of the need for overall coordination of the collection and inventorying of data that is useful to a number of agency programs. In addition where different agencies are involved with a development proposal there is need for a simplified process by which an applicant can learn whether his or her proposal is approved or denied. Recommendations for a streamlined, one-stop permit process are made in Section 7.

Commission Land Use Control Functions

The Commission is organized into three divisions; Planning, Resource Analysis, and Development Review. The experience of the Commission staff in these divisions is establishing and administering interim land use controls, in dealing with actual project applications, and in inventorying, mapping and analyzing resource and land use information, has contributed to the formulation of this Plan. The findings documented here are used in Sections 6 and 7 as a basis for policy statements, recommending zoning districts and implementation strategies.

Planning

The Planning Division's chief function is to ensure that the principles of sound planning, zoning and subdivision control are applied to the unorganized areas. Secondary functions include: undertaking research, providing for public participation in the planning process, coordinating on-going projects with other planning and land use control agencies, and acting in an advisory capacity to the Development Review Division.

During the Commission's formative years, the Planning Division's primary responsibility has been to determine Interim Land Use District Boundaries and permitted uses, to research present and prospective resource uses and to draft policies concerning land use. This latter effort produced a number of draft Comprehensive Policy and Land Use Plans. This document updates and supersedes those previous plans. It has been the subject of nine public hearings and has been revised to reflect many constructive public comments.

Subsequent to Executive approval of this Plan, the Planning Division will work to establish

permanent standards and districts. Over time it will adapt this Plan to changing conditions, provide information about the Plan, publish land use guidance and planning manuals, and review the Plan, the permanent land use standards, and districts at least every 5 years.

The Division's responsibilities over the past few years mirror many of those it will have in the immediate future. Particularly significant are the present interim zoning districts because the new permanent districts will be modeled on them.

The "Land Use Guidance Map" of Carrying Place Township (Map Number 4) shows interim districts and subdistricts mapped for a part of the jurisdiction. The map is typical of the interim zoning district maps and serves to show the form of future permanent subdistricts. Most of the land area shown is zoned Interim Management; Interim Protection Subdistricts appearing on that map are P-3 and P-10 (shorelands), P-4 (wildlife habitat), P-9 (wetland), and P-7 (significant recreation areas).

The three major land use districts, and necessary Interim subdistricts, have generally served well in regulating development. Certainly, they have shown that the concept of different Management, Development and Protection zones works well. In fact, few changes have been needed and the total change (from Interim Management to Interim Development) amounts to only 575 acres. The only other significant changes have been the rezoning of some areas originally designated for protection as deer wintering areas, to Management, and the permitting of development in some Protection districts.

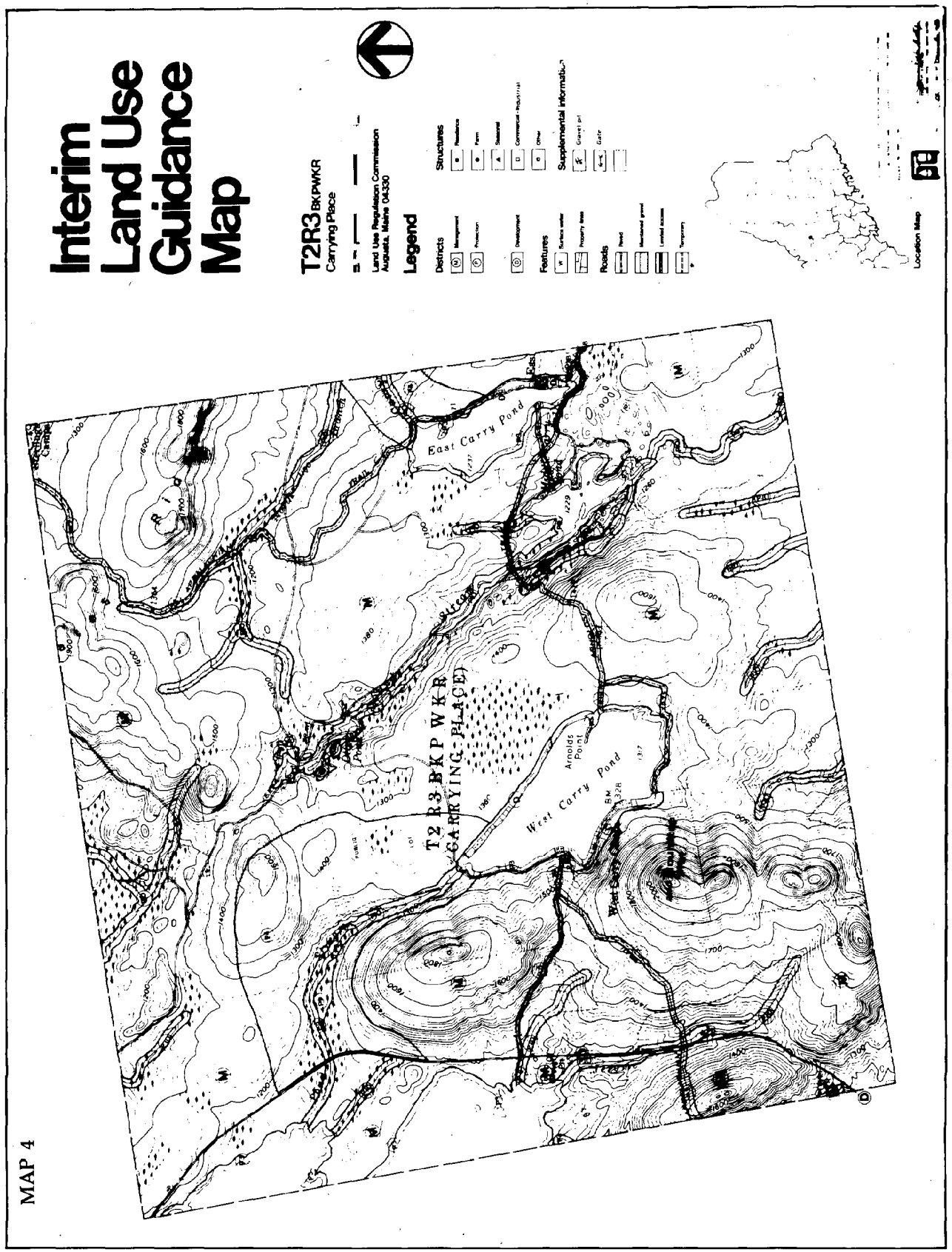
The Planning Division has identified several problems associated with some of the interim Protection subdistricts. Specifically with the following:

Interim P-2 (Flood Prone Areas)	• Land Management roads in flood prone areas can impede flood waters, yet the Commission has no control over their construction. In the future land management roads should only be permitted without review provided they conform with established minimum standards.
Interim P-3 (Shorelands)	• This subdistrict does not encompass enough land area to ensure the protection of lakes and ponds that are in danger of becoming eutrophic.
Interim P-10 (Shorelands)	• No provision is made for structures related to commercial fishing in coastal areas.
Interim P-6 (High Mountain Areas)	• The 2500 foot elevation used to describe the lower limit of this subdistrict has been challenged as "arbitrary" and does not always delineate areas to be protected as well as intended.
Interim P-7 (Primitive Recreation Areas)	• This subdistrict should include remote ponds and streams suitable for primitive recreation.
Interim P-8 & P-11 (Unusual & Special Areas)	• There is considerable overlap in what these subdistricts seek to achieve. They can reasonably be considered as a single subdistrict.

About 79% of the unorganized area is in Interim Management Districts and the regulation of management activities therein is exempted by Statute. There are, however, certain problems in Management districts that need to be addressed. Overall, land owner self-regulation in the district has been effective. However, three concerns have become apparent. First, in some documented cases forestry operations have caused excessive sedimentation of water-ways, through erosion. Accordingly, consideration should be given to extending the protective buffer area or using other methods to guard against erosion around those water bodies identified as being most susceptible to degradation. Second, because of the value of timber and agricultural land to the State, consideration should be given to withholding especially productive areas from non-timber related development. Third, consideration should be given to limiting scattered single-family residential growth from occurring throughout the interim Management district, especially in those areas where the value of the primitive recreational experience is threatened.

Although Interim Development Districts only cover about two percent of the Commission's jurisdiction, they are in need of substantial revision. The Planning Division's experience has shown that:

- The present single Development District does not differentiate between compatible and incompatible land uses; thus, any use is permitted and no provision is made to zone out into a separate zone, a noxious yet legal use.
- The designation of roads as Linear Development Districts complicates realignment and relocation proposals, as both a rezoning application and permit application is required. This type of designation should be reconsidered in order to simplify procedures and speed processing.


Interim
Land Use
Guidance
Map
T2R3 BKPWKR
Carrying Place
Land Use Regulation Commission
Augusta, Maine 04330
Legend
Districts
Structures
Features
Roads
Supplemental information
Location Map
East Carry Pond
West Carry Pond
Arnolds Point
T2 R3 B K P W K R
(CARRYING PLACE)

MAP 4

- Under the present situation groups of existing structures on unsuitable sites are all zoned Interim Development; this invites adjacent residential development which is often inappropriate.
- There are no submission procedures and regulations for large project proposals that rely on a particular location, away from existing development, for their success (an airport, four-season resort or hydro installation, for example). This means that they are not prepared, submitted and evaluated on an equitable basis, and that a straight-forward mechanism for achieving this end is required.
- Furthermore, there is a problem with the present requirement that new development be adjacent to existing. In most cases where development should be kept close to existing services, the requirement is valid; however, where the project depends on a special features or location for its existence, the adjacency requirement is questionable.

Despite these observations, the Planning Division and the Commission as a whole has found that the concept of zoning and land use control under these districts and subdistricts works well. With the changes suggested above and some subdistrict revisions, it can be made to work better.

Another aspect of the Planning Division's responsibilities that has proven effective is its information and citizen participation program. Guidance to land owners and residents in the unorganized areas has been provided with the publication of a number of manuals (see Appendix B). In addition, the staff is presently advising some towns and plantations on means to involve themselves more directly in the Commission's planning. A 30 member Citizens Advisory Board has assisted with review of various drafts of the Comprehensive Plan. Such public involvement in land use control has proven effective and should be continued. Consideration should also be given improving the lines of communication between the Division and the land owners.

Recent experience within the Planning Division has shown that some of its research should focus on development trends, their effect on resource use, and case studies of recent, diverse, development applications, to see how land use regulation can be simplified for both the Commission and land owners. Also apparent is the need to define where future development, near existing developed areas, should occur. This last point serves to show one shortcoming of the present Interim Districts. Under the present system only current uses are zoned and no district or subdistrict invites new development. Thus, the Interim districting not only discourages growth, but it also provides no indication of where new development should occur. This situation is a necessary product of the Interim, start-up phase of the Commission, it should not, however, be a model for the future. Some mechanisms and/or new districts are required so that new growth outside of existing Interim Development Districts can be guided sensibly.

Any such new mechanisms or districts should come to grips with five important aspects of growth:

- Growth adjacent to existing development,
- One house-at-a-time construction that leads to unplanned "strip" roadside development, in undesirable locations,
- Growth in areas distant from existing settled areas,
- Large projects that could in themselves initiate the establishment of a new growth area, and
- Growth in some areas that should have very limited development to ensure their protection for primitive recreation and timber production.

Resource Analysis

Closely allied with the Planning Division is the Commission's Resource Analysis Division. The Division was responsible for interpreting the Interim Standards and Districts to produce an atlas of Interim District Maps. At present it is undertaking a comprehensive land use inventory of the unorganized areas, a vital step in preparation for permanent district mapping. The land use inventory is being done with high altitude aerial photography and a trained field crew, and the data gathered has already proven valuable.

The Division's resource inventory work will take years to complete simply because of the size of the area concerned. However, information is being gathered from State and Federal agencies, land owners and citizens, and a great deal of data has been interpreted from United States Geologic Survey maps. This work, together with information on climate, bedrock geology, and some soils data has permitted the staff to determine information on runoff (and the resulting potential for erosion and sedimentation), steep slopes, large (+25 sq. miles) watersheds, lake areas, and shoreline lengths for some areas.

Furthermore, the Department of Inland Fisheries and Wildlife has provided data needed to map remote ponds, deer wintering areas,

coastal nesting islands and other wildlife habitats. This information is necessary to protecting the wildlife resource.

Particularly pertinent to land use controls on shorelands is the Department of Environmental Protection's lake classification data. The Resource Analysis division is studying this for future application.

The data generated by the Resource Analysis Division is essential to the planning process and the establishment of land use districts that are meaningful.

Development Review

The Development Review Division of the Land Use Regulation Commission is responsible for processing applications for building permits, land subdivisions, other development permits, (such as permits for commercial or multi-family buildings), and timber harvesting and agricultural practices permits in certain areas. The division also prepares staff recommendations concerning variances and rezoning applications.

Since September, 1971 until the present (April, 1976) the Commission has approved over 850 building permits, 64 subdivision permits, 73 development permits and 129 forest operations permits. This amounts to approval of about 98% of all those applications submitted. Many of these have been granted with conditions which must be complied with before a Certificate of Compliance is issued.

The staff has been delegated authority to approve, approve with conditions, or disapprove all routine permit applications. However, the Commission has final responsibility for any decision. The staff does not have and cannot be delegated the authority to make decisions on petitions for zoning changes or variances.

All applications for any permit have to be submitted on standard application forms and, once judged "complete" by the staff, are required, by Statute, to be approved (with or without conditions) or denied within a 30-day period. Action on petitions for changes in Interim land use boundaries or standards is required within 45 days. Pursuant to Section 685. B.4.F., of the Statute, the burden of proof rests on the applicant.

The Development Review Division is bound by Statute to evaluate applications on the basis of Section 685. B.4. of the Land Use Regulation law. That Section requires conformance with State air and water pollution standards, provision for safe vehicular traffic movement and adequate provision for fitting the proposal into the existing natural environment. The Interim Districts and Standards and the standards established in the "Soil Suitability Guide for Land Use Planning in Maine" are also used as evaluative tools.

Applications on projects that concern other agencies (such as the Department of Environmental Protection, Inland Fisheries and Wildlife, etc.) are sent out for their review and comment, upon receipt by the Division.

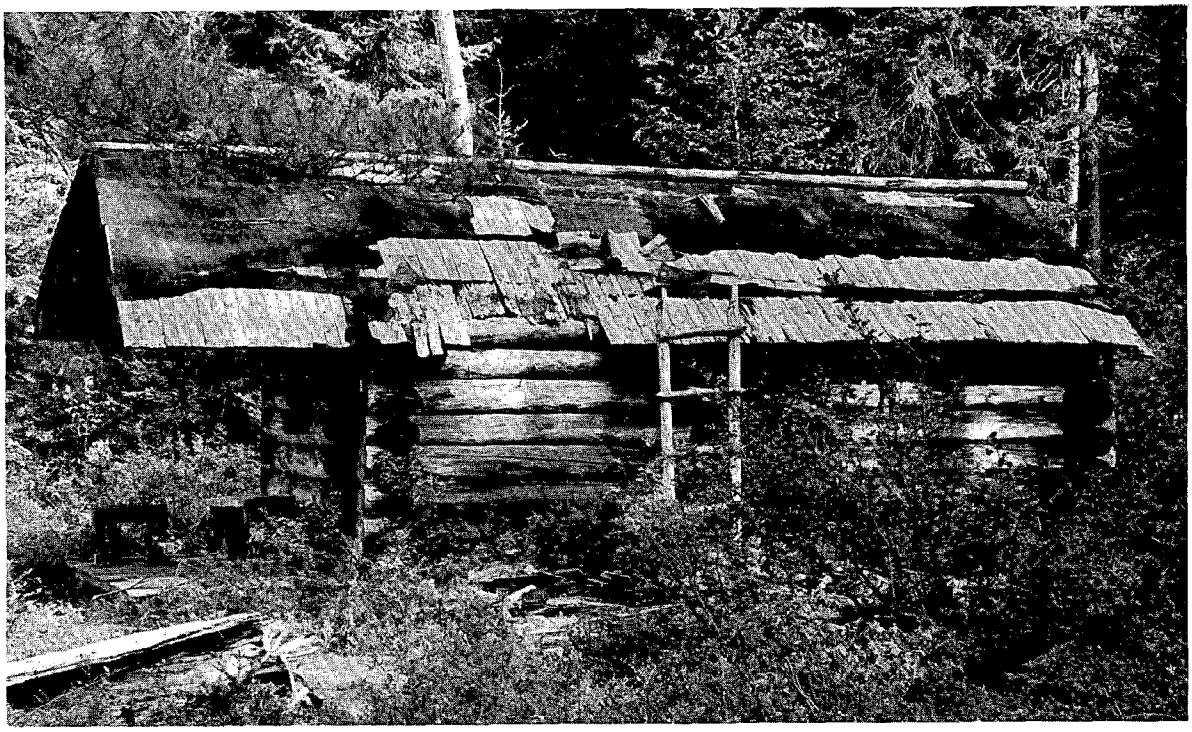
Two regulatory tools that have been useful to the staff have been the "Maine State Plumbing Code", as adopted by the Commission and the "Soil Suitability Guide" referred to earlier. Both documents are valuable as means to ensure that development occurs on suitable soils at reasonable densities. Both relate land use to the capability of different soils and slopes to accommodate the proposed use.

To date the above described review system has proven effective; however, both the public and the staff recognize some changes for the better are needed.

One more recent change has been the establishment of temporary regional offices in Greenville, Machias, and Caribou. These offices process routine building permits and act as convenient centers away from Augusta where land owners can obtain information. They have already proved helpful in speeding the processing of straightforward applications. Nonetheless, delays in the approval of many applications continues to be a major problem. The following actions are being considered as possible partial solutions. Consider:

- Streamlining the application procedure so that an applicant only has to deal with one agency on his or her development project when multi-agency jurisdiction exists.
- The dissemination of more information, in the form of simple educational brochures, to prospective applicants; (on residential sewage disposal, for example, or on the best means to provide buffer strips).
- The design of better application forms, procedures and check lists of requirements.
- The compilation of a development code or single manual containing all the information necessary to submit a subdivision, development, or forest operations permit.
- Increasing staff authority to give them authority to make routine decisions.
- The establishment of a staff hiring system that provides for more permanent and better trained personnel.

All of the above offer means to improve a basically sound permit procedure. Most important is the last suggestion. *Unless all applicants can*



receive professional, expeditious and uniform treatment from the Development Review Division, the regulatory functions of the Land Use Regulation Commission will be open to criticism. This has undermined its effectiveness in the past. Applications could be processed more expeditiously if the Division had adequate staff to handle them.

State Land Use Controls

A search of Maine's Revised Statutes reveals that there are a large number of items relating to land use. Many apply to the Commission's jurisdiction. Some consist of broad policy statements while others serve to support the Commission's goals through the use of police power. The following subsections enlarge on the subject.

For ease of description and for the sake of brevity, the laws and those agencies responsible for them are discussed under headings. Only those of particular relevance to the Commission's functions and the formulation of this Plan are included.

Water Resource Controls

The Department of Environmental Protection (D.E.P.) is responsible for water quality and acts as a review agency for the Commission on certain permits. Through the Great Ponds and Coastal Wetlands act the DEP monitors all activities in these waters. Its Classification of Surface Waters legislation permits the agency to classify the quality of all waters and to assert its police power to control, abate and prevent pollution.

Any project that proposes a public water supply system must be approved by the Department of Human Services. That Department is also responsible for the State Plumbing Code.

The Bureau of Parks and Recreation has authority to acquire and construct public facilities for boating and access to Great Ponds. The Department of Inland Fisheries and Wildlife exercises some land use control in the waters of the unorganized areas and also acts as a review agency to the Commission.

Owners and operators of dams must register with the Soil and Water Commission. The purpose of this legislation is to maintain water levels in bodies of water impounded by dams at the traditional level for navigational, recreational, wildlife habitat and aesthetic reasons. In certain circumstances the Soil and Water Commission will establish the appropriate water level.

Soil and Mineral Resource Controls

The Soil and Water Conservation Commission acts as a review agency to the Commission concerning erosion control measures, soil suitability, and flood plain considerations; it has no regulatory function but serves as an educational and

advisory body.

The Maine Mining Bureau can grant permits for prospecting and mining on State owned lands.

All mining operations, in the unorganized areas, including those falling within the scope of the Site Selection Law administered by the Department of Environmental Protection, are regulated by the Land Use Regulation Commission and reviewed for consistency with the Site Selection criteria by the D.E.P.

Inventory work by the Bureau of Geology in mapping aquifers, aquifer recharge areas and faults has been, and will continue to be, useful to the Commission in defining geologically related resources requiring protective zoning.

Forest Resource Controls

The Bureau of Forestry influences land use in the unorganized areas to the extent that it has powers aimed at fire prevention and the management of forests in the Public Lands. The Bureau also has advisory responsibilities on forest management of private lands and it regulates roadside cutting, as mandated by statute.

The control of spruce budworm through an aerial spraying program is the responsibility of the Bureau.

Wildlife Resource Controls

Since land use effects wildlife management, the Department of Inland Fisheries and Wildlife acts as a review agency to the Commission. It has rules concerning fishways on dams and slash and fill in waters and has identified remote ponds and deer wintering areas in need of protection through zoning, for the Commission.

The Department of Marine Resources has the power to close polluted coastal flats, if need be, where they occur in the Commission's jurisdiction.

Land Use Controls Based on State Ownership

The State owns almost 10% of the land and surface water areas in the unorganized areas and the uses permitted thereon serve as direct land-use controls. The Commission and the Departments of Environmental Protection and Inland Fisheries and Wildlife have varying degrees of control over the Great Ponds and the use of other waterways. These have been mentioned earlier. The agencies responsible for land use control on the major state lands within the jurisdiction, are described below:

A. Public Lands

The Bureau of Public Lands has statutory responsibility for supervising and controlling Maine's public lands. By law the Bureau is required to manage the lands "under the principles of multiple uses..." so that they may contribute to the happiness and well-being of the people of the State. The Bureau's policies regarding land use reflect those of the Commission and the Bureau has the legislative authority to effectively achieve its goals and programs. Recently the Bureau has used its authority to negotiate a number of land trades. In these cases it has identified key land parcels it wishes to acquire and has negotiated to take these in trade for rights and ownership it has in other locations. The concept assures state control, through ownership, of land it deems important for the public good.

B. State Parks

Created for the public's recreational enjoyment, the State parks within the unorganized areas are planned, managed and regulated by the Bureau of Parks and Recreation.

The Director has the responsibility of establishing recreational trails on private or state-owned land as the Maine Trails System. A comprehensive set of land use controls for the Allagash Wilderness Waterway is administered by the Bureau of Parks and Recreation.

Baxter State Park, an area of 200,000 acres surrounded by unorganized areas is under the control and management of the Baxter State Park Authority.

C. Roads and Highways

There are over 1400 miles of public roads in the unorganized areas. All are under the jurisdiction of the Department of Transportation which has authority to plan, regulate and construct on these lands. The Department of Transportation reviews projects with transportation implications for the Commission, while the Commission has responsibility for ensuring that highway projects meet its standards for resource protection. The Statute requires that the Commission assist the Department of Transportation in transportation planning affecting the unorganized areas. (see MRSA, Title 12, Chapter 685 A, (3) (D) & (D1).)

State Taxation as a Land Use Control

The property tax can be an effective tool in encouraging desirable land use. Current use taxation is such a tool and in Maine the Tree Growth Tax and Farm and Open Space Laws are current use tax laws. Approximately 90% of the jurisdiction is taxed under the Tree Growth Tax Law. Basically it taxes forest land according to productivity, rather than according to its "highest and best" use, thereby encouraging management on a sustained yield basis. Productivity is calcu-

lated on the basis of annual tree growth multiplied by the capitalized stumpage value.

When a change occurs on land taxed at current use, a penalty is assessed based either on the difference in deferred taxes or on a percentage of the difference in valuation whichever is greater. The penalties discourage change but do not necessarily prevent it. Nevertheless, the potential to use taxation as a means to encourage certain land use remains. Current use taxation does prevent the forced conversion of land to more intensive use because of taxes based on highest and best use. The lower current use valuation is a definite advantage to landowners provided they wish to maintain land in forest, farm land or open space.

Finally, consideration might be given, by the use of tax incentives and tax exemptions as a possible means for preserving historic, scientific and visual resources in the State and in the unorganized areas in particular.

Private Land Use Controls

Because so much of the land in the Commission's jurisdiction is under large private ownership, and because much of it is managed professionally, there is a degree of privately imposed land use control.

The 6000 to 7000 miles of private road that serve much of the Commission's jurisdiction have brought once inaccessible lakes and areas within easy driving distance of populated areas. The leased lots that edge many a lake are a by-product of this private road system.

Another form of private land use control is that associated with the Appalachian Trail. In this case two private organizations, in consort with various landowners along its route, have established regulations in an effort to control uses and abuses. The same applies to the Arnold Trail.

The North Maine Woods is a group of land owners who through co-operative, integrated management, and with State support, encourage and regulate recreation in the northern portions of the jurisdiction.

Yet another form of self-control is that provided by C.O.L.A. (the Congress of Lake Associations). Albeit a state-wide organization C.O.L.A. is instrumental in both formulating and monitoring legislation and regulation related to lakes.

Obviously the most effective control is that wielded by the land owners, primarily the paper and pulp companies and the land management companies. Some have their own recreation planning divisions and support a high standard of land planning, a necessary ingredient to their own successful land use control. Others are solely involved in forest management. Much of the success of the Commission's goals lies with these large land owners. The more closely the agency and the owners can work to achieve common ends, the more likely it will be that private and public land use controls will work in consort, for the good of all.

One other private land use control that has been used in the unorganized areas is that of the conservation easement. Although the conservation easement has not been widely used inland, twelve easements have been granted for fifteen coastal islands, (according to the Maine Coast Heritage Trust, 1976). The concept is sound and the Commission encourages its use throughout the unorganized areas.

Federal Land Use Controls

Federal law has an impact on land use planning and regulation in Maine. In some cases, federal law requires planning by state or other agencies to deal with identified problems. Other federal legislation may establish minimum criteria whose satisfaction may be assured by the Commission and other appropriate planning and regulatory agencies. In other instances, the availability of federal funds or assistance for certain purposes is predicated on state or local compliance with federal guidelines. The federal controls most directly affecting the Commission's actions are discussed here.

Federal Water Pollution Control Act Amendments of 1972

The Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500) addresses all types of water pollution sources (point and non-point) and problems. The goal of the FWPCAA

is fishable and swimmable waters by 1983. The various sections of that Act are aimed at achieving that end chiefly by requiring state or regional planning agencies to identify and control certain sources of water pollution and by requiring permits for the discharge of certain materials. The Sections currently having the greatest impact on the Commission are:

Section 303 (e) requires each state to develop a planning process to achieve the goals of FWPCAA. It establishes an overall framework for state water pollution control planning. Section 303 (e) calls for Water Quality Management Basin Plans to (1) provide water quality standards and goals; (2) define critical water quality conditions; and (3) provide waste load constraints. These have been prepared for Maine by the Maine Department of Environmental Protection.

Section 208 of the Act calls for more detailed plans covering the whole state and consistent with the above mentioned basin plans, but dealing with one or more of sixteen different elements identified within the FWPCAA as pertaining to the nature of water quality problems in particular areas of the state. The 208 planning for Maine will be conducted by the eleven Regional Planning Commissions and the Land Use Regulation Commission under contract with, and direction of, the Department of Environmental Protection. This planning will occur over a two year period (July 1976 - July 1978) and result in recommendations to alleviate identified water quality problems. The plan will be aimed at achieving the July 1, 1983 water quality goal of the Act — fishable, swimmable water. The Commission's primary emphasis in its 208 planning effort will be to assess and make recommendations for alleviating non-point sources of water pollution. Such sources are generally difficult to monitor, discharge pollutants arising over an extensive land area, and enter the water in a diffuse manner, and at intermittant intervals, after travelling over land.

Section 404 requires a permit from the U.S. Army Corp of Engineers for the discharge of dredged or fill material into waters of the United States. The latter is a very broad term which includes nearly all coastal and inland waters, including adjacent or contiguous wetlands.

Section 402 establishes a permit program administered by the Environmental Protection Agency as a means of controlling the discharge of pollutants from point sources (pipes, culverts, ditches, etc.)

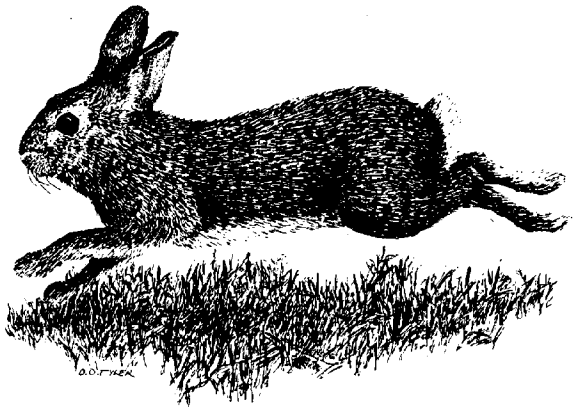
Coastal Zone Management Program

The Coastal Zone Management Act of 1972 provides for the development of management programs for coastal areas — coastal waters, shorelands and those inland areas whose use has a direct and significant impact on coastal waters. Those programs are to define allowable land and water uses within the coastal zone, identify means of state control over land and water uses in affected areas, and describe the overall organizational arrangements for implementing the management plan.

The Commission is concerned with the Coastal Zone Management Program at the planning, resource management and regulation levels because the plantations and unorganized coastal islands and a few unorganized townships which are within its jurisdiction area also located within the Coastal Zone.

HUD 201 Program

The HUD 201 Program has in recent years been a principle source of funds for comprehensive planning at the state and regional level. In Maine, the State Planning Office and the eleven Regional Planning Commissions are the 201 planning agencies. The overall goal of the 201 program is to develop a state land use plan at the policy level. Presently work is being done on the housing element and the land use element, both of which must be completed by August, 1977 to qualify for additional funds needed to complete the plan. There is obviously a considerable degree of overlap between HUD 201 planning and the comprehensive land use planning of the unorganized areas by the Commission.



4 Natural Resources

Maine is rich in natural resources. Most are, in their own way, unique and irreplaceable. Some of these resources date from the distant past when the earth was formed; others reflect occurrences since the appearance of man; still others are dynamic living ecosystems. These resources have economic, recreational, and environmental value.

This section outlines findings on the capabilities of the natural resources of Maine's unorganized areas. The Natural Resource Policies in Section 6 of this Plan, and ultimately the permanent land use standards, are largely based on these findings. The findings in this section are summarized from research by the Commission during the past two years.*

Water

The Land Use Regulation Commission is charged with the responsibility "to prevent the despoilation, pollution and inappropriate use of the water" in the unorganized areas of Maine.[1] Most of Maine's rivers and water supplies have their source in the unorganized areas. Therefore, the Commission has the responsibility of ensuring high quality waters for a major part of the State. The water resource has value as a source of drinking water to sustain human life, as water for fibre crops, as an area for recreation, and as a source of energy for commerce and industry.

It is clear that water is a major public resource which requires protection and management to ensure these values are retained and enhanced.

Equally clear is the fact that the quality of surface waters is inextricably bound to what occurs along their shores and within their watersheds. Water quality control, therefore, frequently requires land use regulations.

Surface Waters

Each type of surface water has its own distinct character.

A. Lakes and Ponds

3378 ponds and lakes an acre or more in size exist in the unorganized areas of Maine covering more than 656,000 acres, or about six percent, of the jurisdiction.[2] Fourteen of Maine's fifteen largest lakes are wholly or partially within the area.

Lakes and ponds are fairly static in nature because they are essentially impoundments. The result is generally slow flushing rates and stratification. Development activities that increase levels of sedimentation, nutrient enrichment and deposition of solids can, therefore, be more harmful along standing bodies than flowing bodies of water simply because they take longer to flush or cleanse themselves.

Eutrophication is the natural aging process of a lake or pond. Young lakes, also called oligotrophic lakes, are low in dissolved nutrients, but contain many different types of fish because they

**Papers based on this research are on file at the Commission's office. The complete list of research papers is contained in Appendix B. They are available for public viewing during office hours.*

are rich in oxygen. They are usually deeper, clearer and colder than older lakes. Old lakes, also called eutrophic lakes, have a high nutrient concentration. These lakes are warmer and may be more shallow than young lakes. The water may sometimes become green or brown due to the great number of micro-organisms present. Some fish, carp for example, can exist in these eutrophic lakes because of their ability to interrupt the food chain at the bottom levels and eat the producing plants.

Man, through industrialization, has speeded up this natural aging process. This is known as cultural eutrophication. Cultural eutrophication has produced changes in many lakes. The increase in nutrients stimulates the rapid growth of phytoplankton, which in turn upsets the food chain. Fish that normally feed on these microscopic plants are unable to consume this excess which sinks to the bottom where the decomposers are found. The decomposers, also unable to utilize the excess material, are virtually smothered by it. This excess material creates sediments that start to build up along the bottom. The bacteria that break down these sediments release a harmful gas, hydrogen sulfide, that can poison the life found in the lake. The rotting plants and dead fish can create a somewhat less than desirable situation.

All lakes are not equally developable. Land use activities and the natural character of the lake and water determine the rate of aging.

A water protection planning strategy should recognize that lakes are different and do not respond similarly to development. Lakes and ponds can be classified according to their main differences. The Department of Environmental Protection classifies standing waters based on trophic state and assimilative capacity; these varying properties of the water should be taken into consideration when drawing up land use standards for shorelands.

The use of shorelands in the jurisdiction varies from primitive recreation to intensive development. Most development occurs at the point of interface of land and water. Seasonal camp development is the most common type of development. About 5500 acres of shoreland is developed. The density is approximately one structure per 1.3 acres.[3] The structures and associated facilities such as privies, septic tanks and fields, and leach trenches are typically located within 200 feet of the shore. Structures located very close to the shore may affect its visual quality, and their facilities have a potentially detrimental effect on water quality. Furthermore, according to *Soil Survey: The Municipal Officers Right Hand* — (Publication #547, Soil Conservation Service) 50% or more of shoreland soils are unsuitable for cottage development that utilizes on-site disposal.

There are methods available to deal with the problems associated with shoreland development. One such method is shoreland zoning and the use of setbacks. Research has been done, and more precise methods exist to limit development of lake shores to appropriate levels based on such factors as soil suitability, the recreation potential of the lake, its trophic state, and its distance from population centers.

Other uses of shoreland areas are forestry, camping, hiking, commercial sporting camps, roads and railroads. Most of these uses encourage other shoreland and surface water uses such as water-skiing, fishing, boating, swimming, and picnicking, all of which can directly or indirectly affect water quality.

B. Wetlands

Both inland and coastal wetlands occur within the jurisdiction. These areas share common land use problems and are recognized as one of the most fragile resource areas.

Wetland vegetation, which may be either terrestrial or aquatic, enhances the wetlands value as wildlife habitat. Wooded wetlands can be the source of commercially valuable timber, such as cedar. Wetlands provide other crops such as blackberries and cranberries. Removal of vegetative cover can upset the delicate soil-water-vegetation-wildlife balance of the wetland.

Soils found in wetlands have water at or near the surface most of the year. These soils have severe limitations for development because they oxidize easily when exposed and cannot accommodate on-site septic disposal because of high water levels.

Peat moss is a commercially valuable product which may be harvested from some wetlands. A considerable amount of peat exists in Washington County. Removal of the full depth of the peat by strip mining can have serious adverse impact on water level, water quality and wildlife.

Wetlands act as natural sponges that absorb, hold, and slowly release surface water. Thus, wetlands reduce peak flows, limit flood damage, and augment water flows during dry periods. Changes in the natural state of wetlands as a result of dredging, filling and building of roads, bridges, houses, etc., alter their ability to perform this important function.

Wetlands are also closely associated with groundwater supplies and act as nutrient traps and settlement basins for suspended materials. Because of the hydrologic characteristics of wetlands, land use activities in and around them which release pollutants can cause pollution of surface and ground water.

Wetlands provide breeding, feeding, nesting and resting areas for a variety of birds, fish and

mammals. The survival of many animal species is directly related to the maintenance of wetlands. Because of the wildlife they support, wetlands provide opportunities for hunting, fishing, photography, and nature appreciation.

Because of the valuable functions they perform and because of their fragile nature, wetlands require protection and land uses therein should be severely restricted.

C. Rivers and Streams

There are about 890 miles of major river systems in the Commission's jurisdiction.[4] Five major rivers drain the unorganized areas and more than 90 major stream tributaries and countless brooks feed these rivers. (See accompanying table and Map number 5.)

Acreage and Average Annual Runoff of River Basins in the Jurisdiction

River Basin	Number of Acres	Average Annual Runoff*** (million gallons per day)
Androscoggin	2,208,000*	3,985
Kennebec	3,757,000	6,500
Penobscot	5,546,000	9,650
St. John	4,710,000	12,115
Coastal	3,988,000**	7,520

*Includes some acreage within the Androscoggin River Basin in New Hampshire.
**Includes Maine axreage within the St. Croix River Basin.
***Includes flow from contributing drainage area in Canada.
Source: North Atlantic Regional Water Resources Study, Appendices J and R.

The character of flowing waters differs from standing bodies. The constant flow and change of water increases oxygenation and dilution capacity. A river is, thus, a dynamic resource that changes as the water level rises and falls. With the exception of flood prone areas, the character, use and ownership of shoreland areas along flowing waters is similar to that of lakes and ponds.

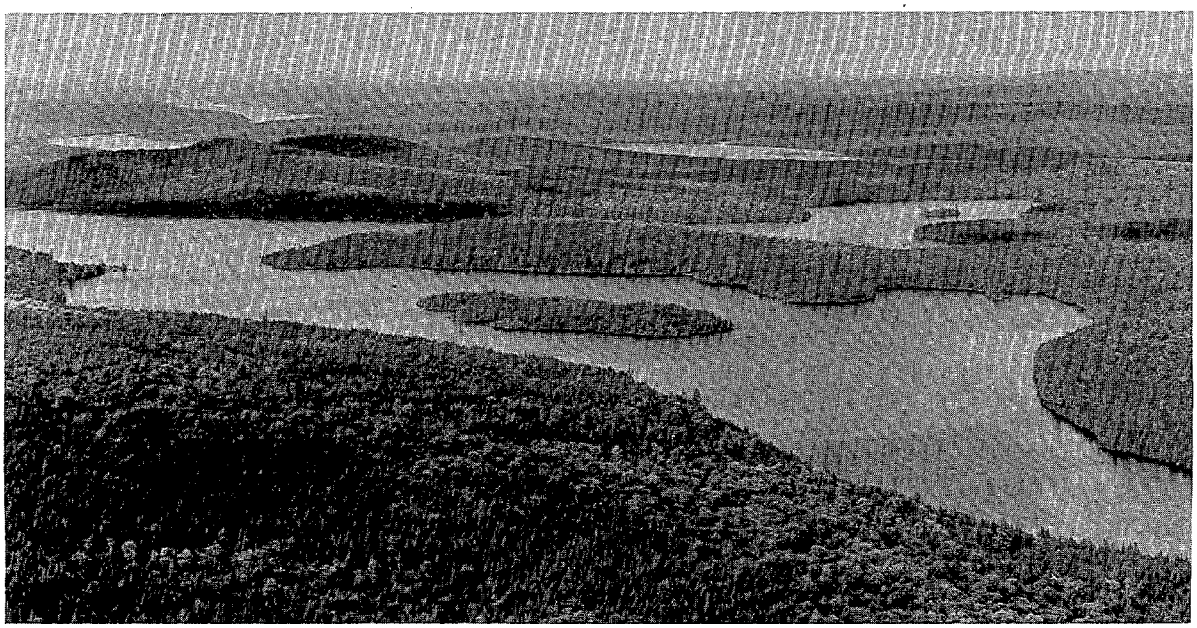
D. Flood Prone Areas

Maine's climate provides great opportunity for flooding in late winter and early spring. Spring rains,coupled with snowmelt, often produce severe flooding. The ice buildup in lakes adds a complicating factor to the situation as ice jams may form and obstruct water flow. When these jams break, devastation can occur downstream.

For purposes of delineating flood prone areas and establishing land use guidelines the Commission will use the one hundred-year flood plan. This is the area on which flooding would occur once in one hundred years, or that which has a one percent chance of being flooded in any given year.

Flood prone areas cover a very small percentage of the unorganized areas of Maine, and destructive flooding has not been extensive. However, isolated flood prone areas do exist.

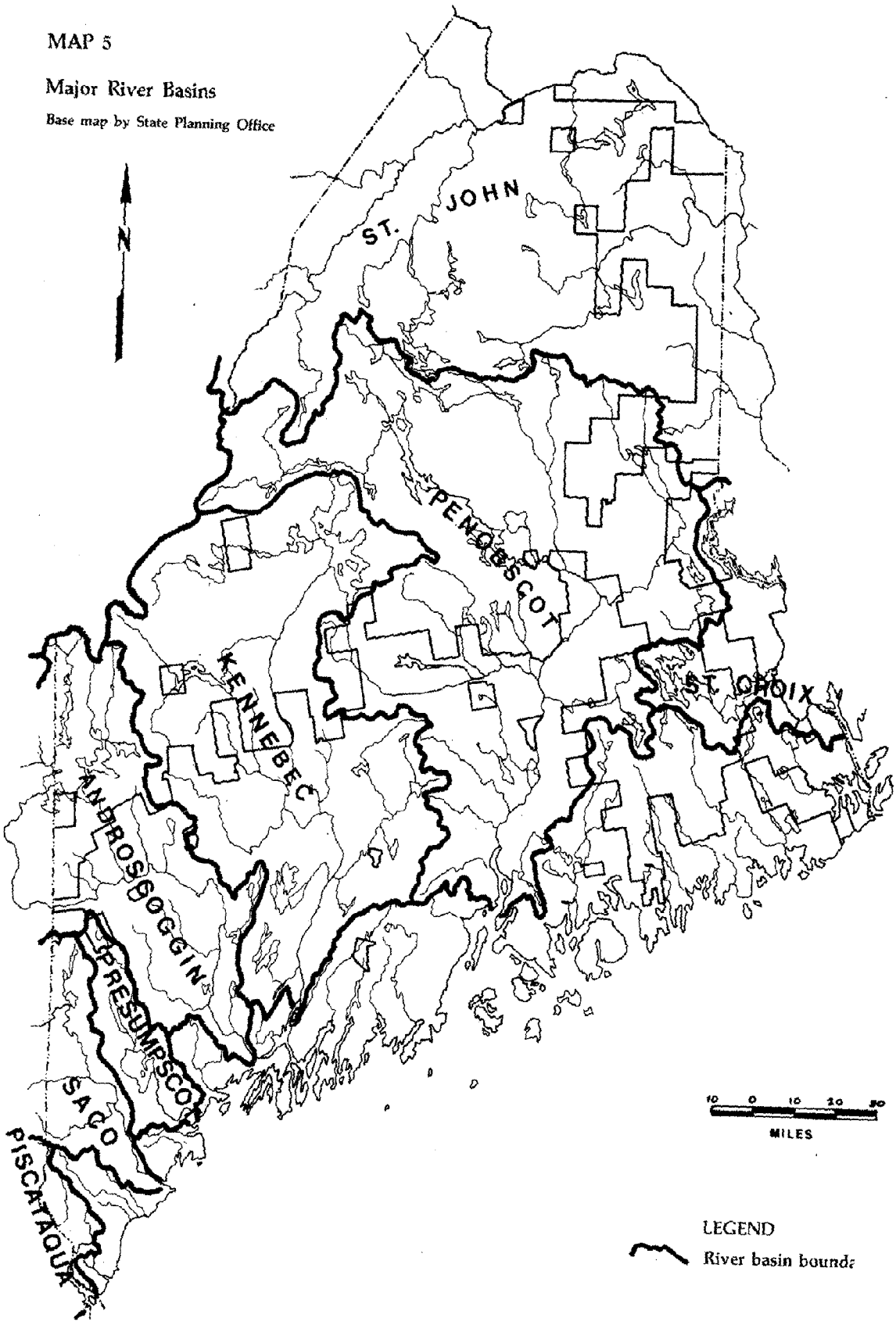
The identification of flood prone areas is useful not only to protect uninformed land owners and developers but preserve potentially valuable agricultural areas. Poorly conceived uses of flood-prone areas contributes greatly to damage caused by floods. The clearing of vegetation and the paving of upland areas can contribute to the



MAP 5

Major River Basins

Base map by State Planning Office



intensity of flooding by increasing the rate of runoff. Bridges, structures, and other manmade obstructions in the flood prone area impede water flow; when pressure builds up behind these structures, they can be swept away. Demolished structures may then contribute hazardous debris and pollution downstream. The cumulative effect of many small structures in the flood prone area reduces its storage capacity. During periods of flooding, flood prone areas augment the stream beds normal carrying capacity and provide a temporary storage area for flood waters. Development in a flood prone area diminishes both of these functions and worsens conditions downstream.

When some form of structure is found to be essential in a flood prone area, the following measures should be taken: (1) flood proof buildings, (2) restrict storage of pollutants, flammables and floatable materials, (3) preserve the floodway so that it serves its natural function of carrying flood waters, and (4) restrict construction and filling that will reduce the ability of the flood prone area to carry or store flood waters.

Flood prone areas within the Commission's jurisdiction are largely undeveloped except for logging operations. This provides the opportunity to control flood damage by limiting further development in flood prone areas, especially areas which are frequently flooded.

Indirect flood controls, such as land use regulations that prevent most structural development in flood prone areas, are more effective and less expensive than direct control such as floodwalls and dams.

E. Watersheds

A watershed is that area draining ultimately into a particular water body or water course. Land use activities throughout a watershed have a bearing on water quality within the watershed. Damaging activities on a small part of a watershed can result in damage to water quality in a much larger area.

At present, the Commission is most concerned with the effect of land use activities on water quality in the direct watersheds of certain, important standing bodies of water. Those are bodies of water used for public water supplies, or water bodies with very low assimilative capacity.

The assimilative capacity of a body of water is affected by size, depth, drainage area, and the annual precipitation/runoff in the watershed. Since these factors vary between water bodies, it is necessary to examine each water body on an individual basis to determine appropriate land use activities in its watershed.

Coastal Islands

There are three island plantations and 113 unorganized islands within the jurisdiction.[5] These islands constitute a unique source of economic, recreational, environmental and aesthetic values.

The quality and supply of fresh water is even more important on islands than inland. Fresh water is most often available in the form of ground water. A small portion of the precipitation that falls on the island infiltrates the soil and migrates slowly downward, filling spaces between soil particles and minute openings in the joints and fractures in the bedrock. Fresh water is less dense than salt water and tends to float upon it.

Islands do not have unlimited supplies of fresh water. The supply is renewed only through precipitation. As a result, the available fresh water supply must be developed and used wisely. Wells located adjacent to the coast should not be drilled too deep, too closely spaced or pumped at a high rate. Just how deep, how close, and how much is not yet known in quantitative terms. Lacking this data, it is best to construct wells as far back from the shore as practical and to use them only for domestic purposes. A fact to remember is that once salt water intrusion has occurred, a lengthy period of time may be required for natural ground water flow to flush the salt out.

Several problems arise with respect to the limited and fragile water supplies of islands. As the supply of fresh ground water is dependent on the ability of the land to absorb rainwater, some forms of intensive development or improper road construction can result in a loss of infiltration and ground water recharge ability. As fresh water on islands is underlain by salt water, excessive pumping can cause a salt water intrusion into a well. Increased numbers of people, even day visitors, can cause increased demand on the limited supply of fresh water. Effluent from septic systems or leach lines can also pollute ground water unless the systems are carefully designed and located.

Water Quality

The quality (cleanliness) of water determines its value and usefulness as a resource. Water quality is threatened by sedimentation, nutrient enrichment, and deposition of various solids. This is true whether the pollution occurs in ponds and lakes, wetlands, rivers and streams, flood waters or coastal island water supplies.

Sedimentation is one of the major sources of water pollution. Causes of sedimentation are both natural and cultural. Many kinds of activities in

the shoreland area of water bodies contribute to sedimentation. Agricultural activities for example can cause high yields of sediment. Land development, such as clearing land, building structures, and the construction of roads and parking lots, increases runoff and contributes to sedimentation. Timber management activities, especially poorly constructed logging roads, can cause erosion, sedimentation and other adverse effects on water quality and aquatic life.

Artificial nutrient enrichment (the deposition of organic materials through erosion) results in the increased growth of weeds and algae and the consequent lowering of water quality — for drinking, for recreation, and for fish and wildlife habitat. Nutrient enrichment occurs as a result of agricultural and development activities, sewage treatment and to a lesser extent, from clearcut timber harvesting.

Agricultural sediments can pose serious problems since they carry large amounts of nitrogen, phosphorous; plant nutrients, and other agricultural chemicals, including pesticides and fertilizers. Land development related sediments such as road salts, oil, fertilizers, and chemicals are carried in surface runoff and deposited in surface waters. Subsurface percolation from septic systems and contaminated ground waters can contribute nutrients to water supplies. Clearcutting of forest land will cause increased nutrient release into nearby waters but the effect is short term and of relatively minor impact.[6]

Water quality is also affected by foreign materials deposited in water bodies. Saw milling, log driving and storage, pulp and paper making, timber harvesting, oil spills and sewage treatment plant effluent and various solid waste depositions can affect water quality.

The amount of sedimentation, nutrient enrichment and deposition of other materials resulting from agriculture, timber management and other development activities can be reduced by sound land use and management practices. In addition, maintenance of a filter strip of undisturbed land between bodies of water and conflicting land uses can greatly reduce the introduction into water bodies of sediments, nutrients and other pollutants affecting water quality. Such a filter would also reduce the visual impact from the lake of shoreland development.

The Commission is also concerned with the supply of water. The quantity of water is a fundamental limitation to any development. Potential sources of potable water should not be threatened by poor development. Yet the variety of uses pursued on surface waters and in shoreland areas can result in conflicts. The more these waters are used for other activities, the more risk there is of degradation. Land areas associated with surface waters are an essential part of the water resource. Watershed management is, therefore, necessary to protect drinking water and industrial water supplies.

Soils and Geology

There are approximately 10,000,000 acres of dry land within the Commission's jurisdiction. This area contains a variety of soil, mineral and geologic resources.

Soil

Soils in the State are the result of the deposition of glacial till, glacial outwash, or marine and lake sediments in standing water. Soil develops as a result of the weathering of mineral materials.

Tills, outwash, and marine and lake deposits contain a range of materials of different composition and grain size. Although a common scheme for classifying grain size does not exist, there are natural limits which characterize the physical properties of soil. Gravel, sands, silts, and clays exhibit characteristic physical properties.

Both the structural classification (till, outwash, etc.) and the textural classification (gravels, sand, etc.) provide general information on the capability of soils to sustain development. However, for a thorough analysis of soil suitability much more intensive testing, analysis, and mapping of specific soil properties are required.

Although a medium intensity soils inventory is of greater importance in land use planning, the rate at which such information is becoming available for the unorganized areas of Maine is extremely slow. Presently between 225,000 and 250,000 acres have been inventoried in the Commission's jurisdiction. The Soil Conservation Service estimates it will take 10 to 12 years to complete the task. Mapping should concentrate first on those areas that are most likely to be developed and on those areas identified as "fragile" and probably unsuited for development.

While certain limitations to development are associated with certain kinds of soils, (which can only be identified by the soil survey) other limitations may be present in all soils. Land use policies should take into account these general limitations.

One such limitation is the propensity of soil to erode. Erosion is a natural physical process. But it is one that is almost always accelerated by development. With erosion there is accelerated discharge of natural pollutants such as mineral soils and organic matter. The principal factors

influencing the rate and amount of erosion are:

1. the extent to which the natural cover is removed;
2. the time interval between the removal of the natural cover and its restabilization;
3. the size of the affected area;
4. the nature of the affected soil;
5. the length and steepness of slopes; and
6. climatic factors.

Sedimentation is a problem closely related to erosion. Unless precautions are taken, erosion may result in the sedimentation of surface waters.

Sedimentation has several detrimental effects. It reduces the storage capacity of water courses, thereby increasing flood heights and flood damage. Sediments increase treatment costs for municipal and industrial water users. Sediments reduce dissolved oxygen levels, and contribute quantities of plant nutrients to surface waters, thus contributing to eutrophication. Sediments carry large quantities of biological agents and chemicals which are released into aqueous solution to the detriment of public health, fish spawning and other aquatic life.

The solutions to erosion and sedimentation problems are: (1) broad based land use planning that guides development away from unsuitable areas, and (2) land treatment and structural measures that minimize erosion and help prevent sediment from entering surface waters.

Because many forms of development cause increased run off, erosion can be minimized by planning erodable areas for low intensity uses. A study of the impact of development on forest watersheds concluded that development reduces infiltration, soil moisture storage, evaporation, and interception and transpiration of rainfall by vegetation. Peak flows can be increased by one and one-half to five times, and sedimentation can be increased by five to ten times.[7] The effect is greatest at the time of development.

Where development does take place it is possible to minimize construction site erosion and sedimentation by proper timing of the activity; preserving natural vegetation wherever possible; avoiding unnecessary disturbance of the soil; use of temporary control methods, the early installation of permanent drains and roads; replanting disturbed areas quickly; installing proper structures, including catch basins; and preserving shorelands of water bodies and natural drainage areas in their natural state.

The final soil characteristic which influences land use is fragility. Fragile soils are inappropriate for intensive land use because they erode easily and are unusually affected by erosion or mass movement. Factors which influence the fragility of a soil are:

1. soil depth;
2. soil texture (the relative proportions of clay, silt, sand and coarse fragments);
3. soil drainage (the frequency and duration of periods when soil is free of saturation or partial saturation with water;
4. soil slope (the incline of the surface of the soil expressed as a percent; thus a soil with a 10% slope falls 10 feet vertical distance for 100 feet horizontal distance;) and
5. lack of cover.

These factors may act singly or in combination with one another. The size of the affected area is also important. A large area with fragile soil is more likely to cause erosion problems than a small area.

Bedrock and Surficial Geology

The present topographic characteristics of Maine are the result of relatively recent glacial activity which occurred about 12,000 years ago. The forces active during that period reshaped preexisting features. Lakes, river channels, terraces, eskers, and moraines were formed, and sand, clay and gravel were deposited by the ice. Mountains were lowered and rounded, and valleys were scoured to their present shape. The major topographic regions of Maine are the seaboard lowlands, New England uplands, and the White Mountains section. (See Map 6 of Physiographic Regions.)

The bedrock of Maine is both igneous and metamorphic in origin. The igneous rocks are formed along two volcanic belts, one located in a line running approximately from Rangeley northeast to Houlton, and one between Penobscot Bay and Eastport. The principal igneous rocks of Maine are granite and gabbro. Lying northwest of each of these volcanic belts are areas of stratified rocks, layered formations that have undergone metamorphosis. The degree of metamorphosis is greater in southern Maine and decreases as one moves northward. The dominant rock types in these stratified areas are slate, shale, limestone, and sandstone. Slates and shales occupy the largest percentage of the bedrock in the unorganized areas. These types of rocks along with limestone are frequently highly fractured and constitute good bedrock aquifers. Although granite is not a good water bearing rock, significant bedrock aquifers may occur where the granite is highly fractured.

Faults and shear zones which may present hazards to certain types of development are found throughout the jurisdiction of the Commission. Faults and shear zones are frequently areas of

significant bedrock aquifers and are also the most likely areas for mineral deposits.

Surficial geologic deposits consist of:

a. alluvial deposits of sand, silt and clay and some gravel on flood plains of rivers and streams;
b. swamp deposits of partly decomposed organic matter sometimes intermixed with sand, silt, and clay;
c. outwash deposits along major streams and rivers consisting of stratified sand and gravel;
d. marine and lacustrine deposits of silt and clay with some very fine sand intermixed;
e. ice contact deposits such as kames, containing well stratified to poorly stratified deposits of sand, gravel, cobbles with some silt, clay and boulders;
f. glacial till or ground moraine containing a heterogenous mixture of clay, silt, sand, gravel, cobbles, and boulders.

To the extent that surficial geologic deposits are unstable they present a hazard for development activities. Surficial geologic deposits may contain economically valuable sand or gravel deposits and important aquifer and aquifer recharge areas.

Ground water is very important to the continued availability of a supply of good quality drinking water. Ground water is contained in underground formations called aquifers which may be composed of bedrock or surficial deposits. The water stored in aquifers is released to the surface through wells, springs or seepage in rivers, lakes, ponds, and wetlands. Ground water is replenished from the surface through a process called ground water recharge. Water from surface waters seeps down into an aquifer or, where a aquifer is exposed to the surface precipitation, percolates directly into the aquifer. Consequently, aquifers modify surface flow; they absorb water during rains or periods of high flow and then gradually release it during periods of low flow. Development that seriously reduces that ability of an aquifer to absorb water or that can pollute it, should be regulated.

Mineral Resources

There are significant deposits of sand, gravel and peat as well as lesser amounts of other minerals, many of which may become commercially valuable, in the unorganized areas of Maine. Commercial mineral extraction can contribute to the economic well being of an area. It can also detract from other values.

Improperly conducted mining operations can cause disruption of local ecosystems, and can adversely affect water quality through siltation and acid drainage. Mining operations may destroy the visual qualities of an area; and, if located in a residential or commercial area, may constitute a severe nuisance due to noise, dust or odor. Surface mining without reclamation removes the productive capacity of the mined area and can substantially alter local topography and drainage patterns. On the other hand, permanent development, for purposes other than mineral extraction, of areas containing mineral resources precludes the future use of those mineral resources.

The strip mining of peat can result in substantial damage to wildlife habitat and water quality. However, peat mining under controlled conditions that allow for regeneration can occur with minimal disruption.

Exploration is necessary to locate mineral deposits for planning purposes and for future extraction. That exploration should be conducted in a manner that creates minimal disturbances.

Where mineral exploration and extraction operations are conducted, provision should be made in advance for reclamation of the affected area.

Forests

Proportionally, Maine is the most heavily forested state in the nation. About ninety-four percent of the unorganized areas is forest covered. The bulk of this forest, about sixty-seven percent, is the spruce-fir type. (See Map 7 of Major Forest Types.) This forest is located largely in the northern and western portions of the state and within the jurisdiction of the Commission.

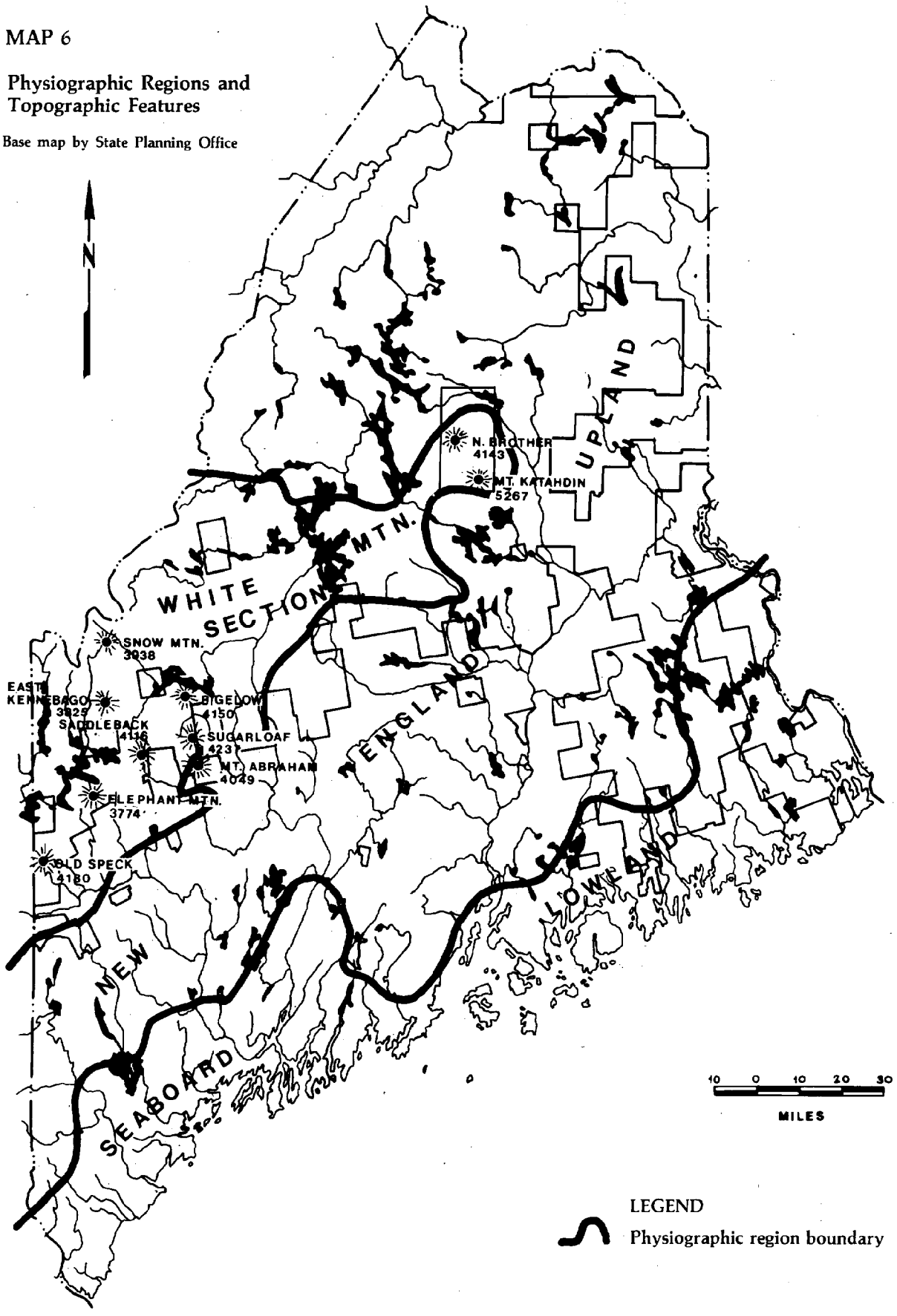
The forest land in the Commission's jurisdiction is held mostly by several large land holders (pulp and paper companies, family trusts, and land management firms). About seventy-eight percent of the commercial forest land in the unorganized areas is held by twenty such land holders. (See accompanying table for breakdown of public and private ownership in the jurisdiction).

A tabulation of figures in the 1971 Maine State Valuation showed that there were approximately 3,500 landowners with parcels of less than 10 acres and about 2,000 ownerships of between 10 and 1,000 acres in the unorganized areas. The smaller ownerships are generally used for seasonal-recreational purposes. They are usually located near a lake or a ski area and in proximity to other small lots. The 10 to 1,000 acre tracts are held either for residential, speculative, or small scale forestry purposes. They are scattered throughout the area, although they occur more frequently in the townships closer to organized towns. In addition to this there are over 6,000

MAP 6

Physiographic Regions and Topographic Features

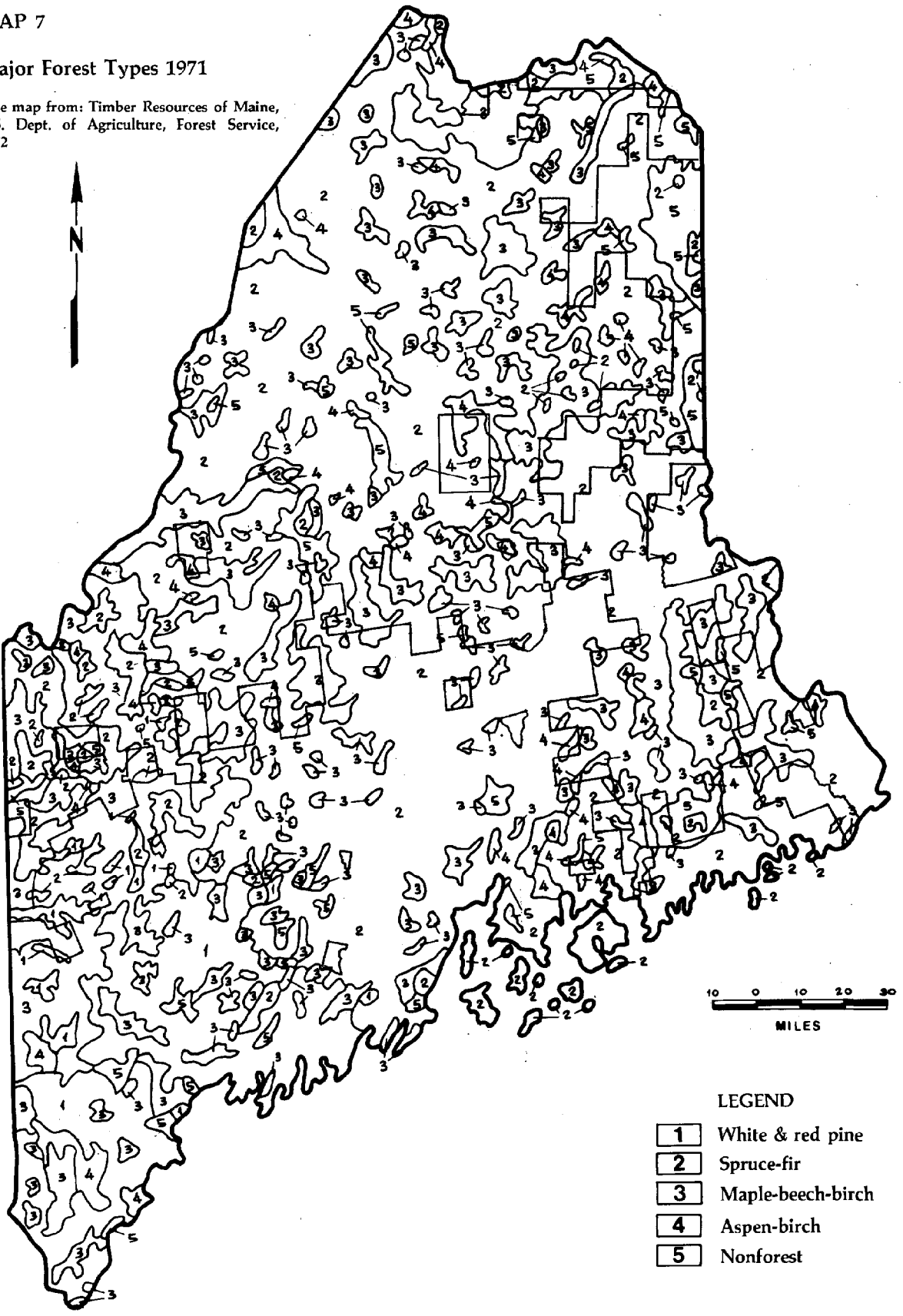
Base map by State Planning Office



MAP 7

Major Forest Types 1971

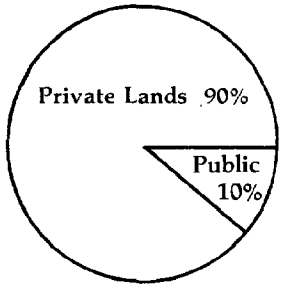
Base map from: Timber Resources of Maine, U.S. Dept. of Agriculture, Forest Service, 1972



Land Ownership

PRIVATE LAND	Acres	PUBLIC	
Pulp & Paper Industry	5,315,000	Surface Waters	630,000
Land Management Co's	2,181,000	Public Reserved Land	400,000
Smaller Ownerships	1,990,000	Other	50,000
TOTAL	9,486,000	TOTAL	1,080,000

(All Figures Approximation)
Does not include acreage in Baxter State Park



leased lots in the jurisdiction, mostly located on lake shores for seasonal use for recreational purposes.

The continued existence of a healthy and vigorous forest in the unorganized areas of Maine is essential to the economic well being of Maine and many of her citizens. Forest based industries account for thirty-eight percent of the total value of manufactured products in Maine and thirty percent of the work force employed in manufacturing is employed by wood using industries.

The timber inventory of Maine is presently increasing, i.e. annual growth exceeds removals. This, however, is not a stable picture, as the removal rate is increasing faster than the growth rate, and some species are being used faster than their respective growth rates.

Softwood removals during 1970 was 50 percent of new growth, while the removal rate for hardwoods was 83 percent. Spruce and fir have favorable growth-removal relationships; removal of white pine and sugar maple equal growth; removals exceed growth for northern white cedar, northern red oak, yellow birch and ash.

A total of 408 million cubic feet of timber was harvested in Maine in 1970. Pulpwood, the principle use, accounted for 67 percent of the total harvest.

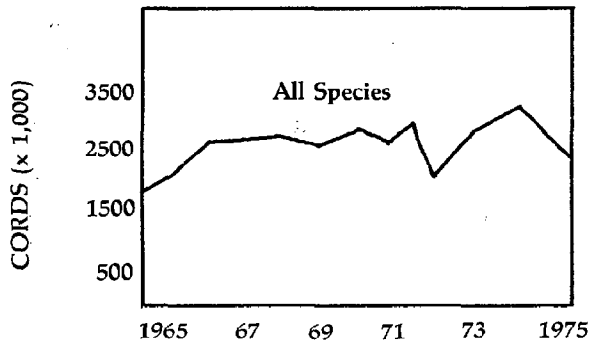
Timber for logs is the second most important use of Maine wood, and accounted for 26 percent of the 1970 harvest. Additional uses of timber in the State are for turnery bolts, veneer, boltwood, posts, poles, firewood, as well as numerous other uses.

The demand for timber is increasing. If removals continue to increase at present rates, they will equal growth by the end of the 1980's and may exceed growth by 335 million cubic feet by the year 2000.

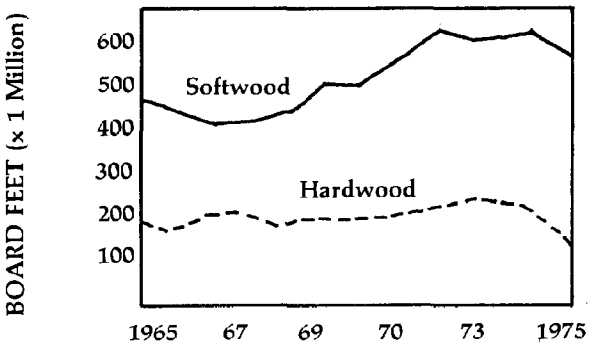
Scientific forest management techniques such as tree planting, fertilization, and improvement thinnings may be necessary to insure a continuous flow of timber from the Maine woods. At the same time land which is valuable for tree growth will have to be reserved from development which removes the land from production.

In addition to the current adverse growth-removal rate of some grades and species of timber, another threat to the viability of the forest, at least in the short-term, is the spruce budworm infestation of spruce-fir stands. At present nearly all of the state's 7.8 million acres of spruce-fir are infested to some degree. About 3.5 million acres are severely infested.

Aerial spraying of chemical pesticides has been used to combat the budworm problem since



The trend of pulpwood production in Maine - 1965 to 1975



Sawlog production in Maine for selected years, 1965 to 1975

1954 on an on-off basis. Large areas have been sprayed annually since 1972. This year (1976) 3.5 million acres were sprayed.

Until it was banned in 1967, because of harmful environmental side efffects, DDT was used exclusively. Since that time a variety of other chemicals have been tried. The new chemicals appear not to have the detrimental side effects of DDT. They are biodegradable, do not accumulate up the food chain, and are less persistant (do not remain active for more than a few weeks). Nevertheless, long-term, sub-lethal effects on water quality and fish and wildlife habitat from widespread application of large areas of forest, often on a yearly basis, is not known.

Control methods have relied heavily, if not solely, on chemical spraying to kill budworm and to maintain foliage. There is considerable evidence that complete destruction of the budworm is impossible and that spraying not only prolongs the duration of the outbreak portion of the budworm cycle, but increases the frequency of outbreaks.[8]

Alternatives to chemical spraying do exist, but have been little used due to relative costs and the ready availability of chemicals for spraying. Since spraying may prolong outbreaks, since the long term effects of heavy, continuous spraying are not known, and since chemical pesticides are becoming increasingly costly and difficult to acquire, it may be desirable to pursue an integrated budworm control program including chemical spraying where necessary, silviculture practices to reduce forest susceptibility to budworm attack, budworm pathogens, parasites and predators (especially in sensitive areas where chemicals could have harmful side effects), and salvage of dying trees. The long range budworm suppression program instituted by the Legislature in 1976 incorporates this and other features.[9]

In addition to timber production, several other uses of the forest are possible. Management for multiple use, recognized by the Legislature to be in the public interest in the Land Use Regulation Statute, is a concept that calls for the most judicious use of resources for a variety of compatible purposes. Besides timber production, possible uses of the forests of the jurisdiction, include use for watershed protection, recreation, wildlife and fisheries habitat, and mineral extraction.

Through the cooperation of land owners, public use of the forest, particularly for non-intensive recreation, has been allowed for many years in those areas where it is consistent with the timber production goals of the owners.

Despite this, there are aspects of multiple use which are incompatible, to varying degrees, with timber production. Where cooperative agreement fails, land use controls can be used to assure multiple use management. Care must be taken, however, in developing and administering land use controls so that they respect both the interests of private landowners and the public.

Nevertheless, the dominant use of the forest resource will and should continue to be timber production. Development which commits land irrevocably to other uses and detracts from the timber resource should be guided away from prime timber production areas.

Erosion and Timber Harvesting

Improperly located and poorly planned and constructed logging roads and skid trails are a major cause of soil disturbance in forests.

Considerable erosion in forests results from cuts and fills in logging roads and from concentrated water runoff on poorly drained roads.[10] The hazard of erosion is greater when logging roads are placed on steep slopes, unstable soils, or near surface waters.

Poorly planned skidding activities are another cause of forest soil compaction and erosion. Use of the wrong type of equipment for the terrain, careless use of mechanical equipment, and skidding in wet, erodible soils are the major causes of this erosion and compaction.[11]

Water Quality and Timber Harvesting

The total removal of trees along a stream can result in as much as a 15°F. rise in temperature due to loss of shade.[12] This may exceed the tolerance limits for trout and salmon. Continuous increased temperatures can affect feeding, disease control, and oxygen level. Temperature increase can be lessened by leaving a broad filter strip of trees (thinned if necessary) along the shores of lakes and streams.

Logging operations can cause direct alterations to stream channels. Bridge and road construction, cross stream skidding, and slash (tops, limbs, and cull trees) left in stream channels can lower water quality. Such activities increase turbidity and sedimentation and can deflect stream channels, impede flowing waters, causing channel scouring, and create barriers to fish migration. Retention of a vegetative buffer strip acting as a filter for sediments between logging operations and water bodies will help prevent degradation of water quality. When stream crossings are necessary, the effects of construction can be minimized if guidelines such as those contained in "Permanent Logging Roads for Better Woodlot Management" are followed.[13]

Accelerated nutrient enrichment can be a problem in heavily cut areas adjacent to water bodies. Heavy cutting releases an increased load

of nutrients which may not be used by remaining or new vegetation. The effect on stream biology depends on the amount of tree removal, the rate of revegetation and the chemistry of the water and soil.

Wildlife and Timber Harvesting

Use of the forest for timber production has varying effects on the ability of the forest to sustain different species of wildlife. Two of the more important forms of wildlife to Maine people are whitetailed deer and fish.

The existence of deer depends on the availability and proper interspersion of food and cover. Dense stands are needed for winter cover while open areas are necessary for food production in the form of new growth at ground level. Thus timber harvesting contributes to the health of the deer herd by making food available. Proper management of a herd also requires the conservation of winter cover.

Any large disturbance within a watershed has the potential to effect the quantity and quality of streamflow and the diversity of aquatic habitat downstream from the disturbance. Logging operations, for example, affect the water bearing capacity of the forest and thus can affect water yields. Timber harvesting also has the potential to damage water quality by increased stream turbidity and sedimentation, added dissolved materials, and changes in water temperature.

Agriculture

Only a small portion of the area within the Commission's jurisdiction is used for agricultural production. Potatoes (18,000 acres) and blueberries (8 - 10,000 acres) are the major cultivated crops.[15] In addition there are smaller amounts of land devoted to poultry, apple, vegetable, dairy and beef cattle farming.

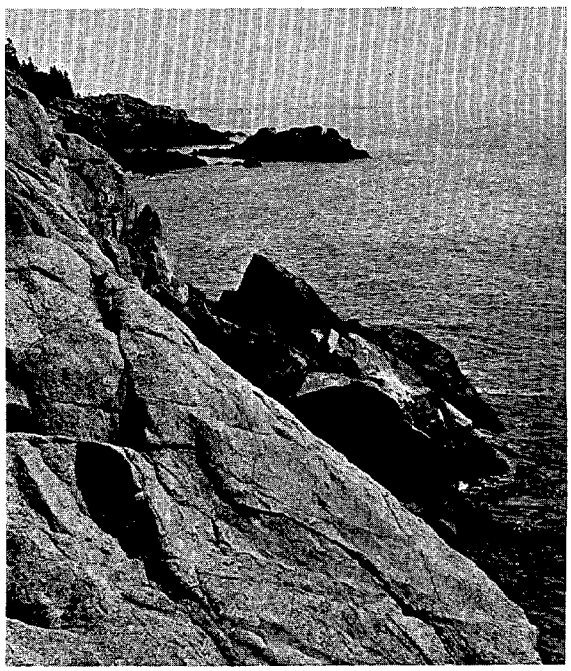
A number of factors contribute to the limited extent of agricultural activities within the Commission's jurisdiction. Some soils are unsuitable and the growing season is short. Another factor is the low level of year round population. The pattern of ownership, the bulk of the land being held by large landholders for timber production, is also a limiting factor. Transportation time, distances, and costs are also factors that limit expansion of agricultural activities in the unorganized areas.

The fact that agriculture is not widespread does not mean that the land lacks the potential for such use. The Northeastern United States and the Atlantic Provinces of Canada are among the few places in the world where the average precipitation is the same for every month of the year. This means there is no problem of drought during the growing season. In addition, the soils of this area are generally good, well drained, and biologically favorable except for the presence of many rocks and boulders deposited by glaciers.[16] This factor has often restricted or prevented agricultural use of the land.

An issue of critical national and global importance is the removal of productive agricultural land from food production. Permanent development on agricultural land removes that land from future production. Thus the use of less productive agricultural land (which is often suitable for permanent development at only slightly higher preparation costs) can preserve the productive capacity of prime agricultural land. The U.S.D.A. is currently inventorying agricultural land in Maine as well as the rest of the United States to determine areas of prime and unique farmland.

Air

Maine Revised Statutes state that the Commission's land use standards shall "encourage the most desirable and appropriate use of air, land and water resources..." and that the public's health be protected by the reduction of air pollution. (See M.R.S.A. 12, Section 685-A, paragraphs A and B.)



At present the unorganized areas generally have clean air and the only threats to this quality occur in localized areas in the form of particulates and sulfur-dioxide. The sources of these pollutants are primarily open burning dumps and sulfate process pulp mills. (High sulphur heating fuel can degrade local air quality). The Maine Legislature exercised its police power to control present and future sources of emission of air contaminants through M.R.S.A. 38, Section 581, the Protection and Improvement of Air.

Recreation

This section deals with the potential for outdoor recreation activities in the jurisdiction. Recreational facilities, housing and related development are dealt with in Section 5.

Within the 10½ million acres of the unorganized territory, only 31,000 acres are publicly owned. Baxter State Park (201,018 acres) managed by the Baxter Park Authority, does not fall under the jurisdiction of the Land Use Regulation Commission. The Allagash Wilderness Waterway and other state parks are within the jurisdiction of the Commission but are managed by the Bureau of Parks and Recreation. Significant parks available for recreation are Grafton Notch Park in Oxford County, Lily Bay State Park, Farm Island and Squaw Mountain on Moosehead Lake, Katahdin Iron Works in Piscataquis County, Cobscook Bay State Park, Quoddy Head State Park and Pleasant Lake in Washington County, and part of Rangeley State Park in Franklin County. (See Map number 8.)

The 400,000 acres of public reserved lands, the so called "public lots", although under Land Use Regulation Commission jurisdiction, are the responsibility of the Bureau of Public Lands. The task of the Bureau is to determine for each lot the most efficient and economic management for multiple use purposes, including forestry, recreation and wildlife.

Not included in the above figures on state ownership are the Great Ponds, all lakes and ponds ten or more acres in size, which are considered to be owned by the State with Common Law rights of access and use by the public.

The federal government administers about 69,000 acres in the unorganized area. This includes part of the White Mountain National Forest in Oxford County and the Moosehorn National Wildlife Refuge in Washington County. Although each of these areas are managed primarily for other purposes, many recreational opportunities do exist.

Finally, it should be noted that the bulk of unorganized area is undeveloped and, while privately owned, provides a variety of recreation opportunities for Maine residents and visitors. There are mountain ridges and tops for climbing and hiking; lakes for boating and fishing; rivers for canoeing and fishing; solitude for primitive camping, extensive forests for hunting and trapping; sandy beaches for swimming; mountain slopes for downhill skiing; long, snowy winters for snowmobiling, cross country skiing, and snowsledding; and numerous unspoiled coastal islands for wildlife viewing and seashell collecting. In summary, the unorganized area is an expanse of undeveloped land ideal for primitive and natural environment related recreation activities.

The Maine Bureau of Parks and Recreation is in the process of preparing the updated (1977) Maine Statewide Comprehensive Outdoor Recreation Plan (SCORP). That Plan is a requirement of the Bureau of Outdoor Recreation for continued participation by the state in the Land and Water Conservation Fund Program (LAWCON) which provides federal matching funds to state and local governments for the planning, acquisition and development of outdoor recreation areas and facilities. The 1977 SCORP will include a section which analyzes the outdoor recreation supply, demand, and needs for Maine's unorganized townships and plantations with the objective of identifying the recreation management problems and needs of the area including problems pertaining to access, facilities, destination, and regulation.

The continued existence of some of these natural areas for certain recreation uses can be threatened by increased pressure for development there. The Legislature expressed its concern for the continued availability of natural resources for non-intensive outdoor recreational activities when it declared it to be in the public's interest "to encourage the appropriate use of these lands (unorganized areas) by the residents of Maine and visitors, in pursuit of outdoor recreation activities, including, but not limited to, hunting, fishing, hiking and camping." The Statute further requires the Commission to place in Protection Districts "areas where development would jeopardize significant natural, recreational and historic resources..."

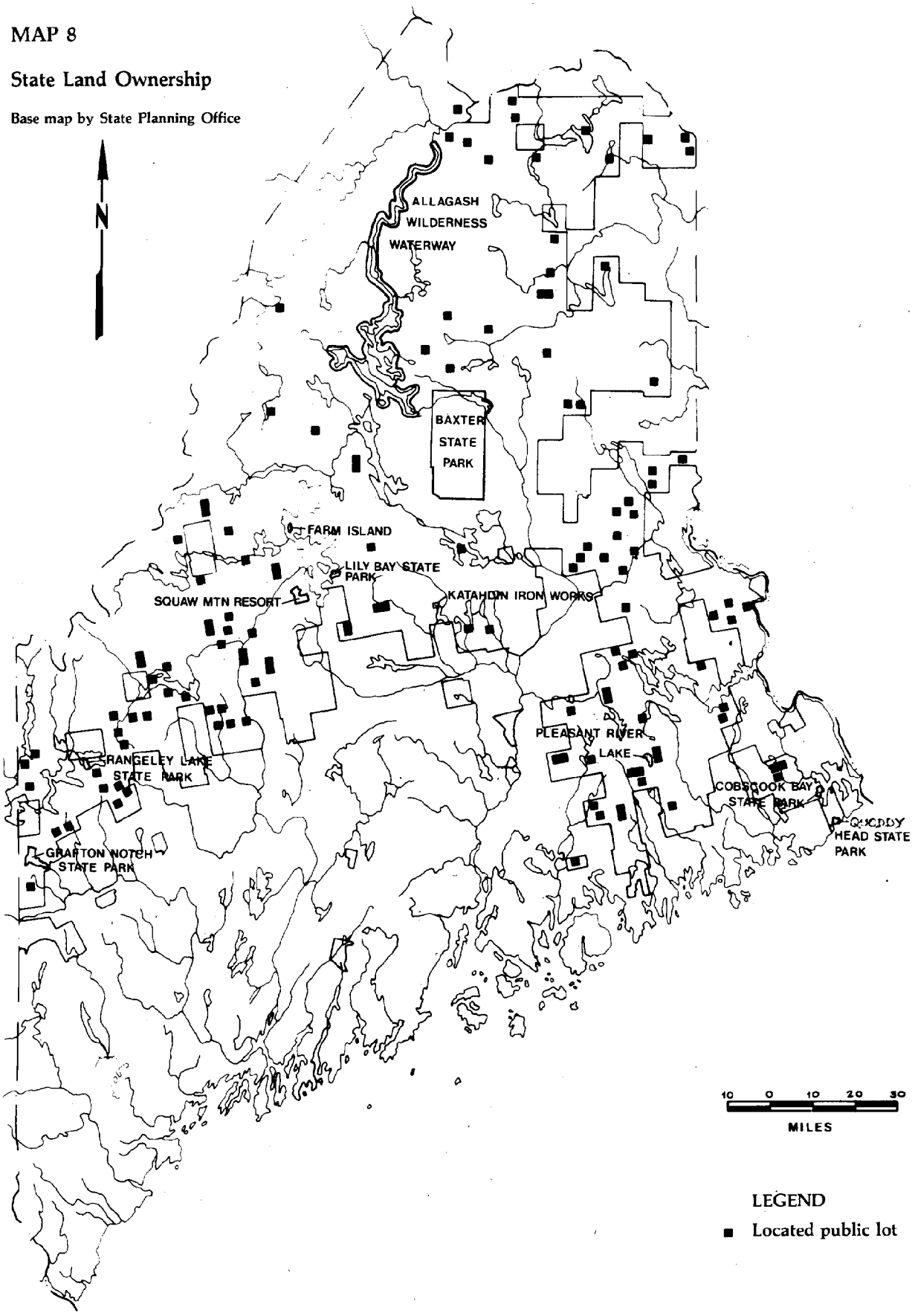
Thus, where development may threaten significant resources, it may be necessary to limit use activities to preserve an area for certain special recreation uses not commonly available.

For example, a limited number of remote ponds should be allowed to remain in their natural state for their unique value as a recreation resource. Opinion surveys indicate that a majority of Maine citizens and visitors feel this is a good concept. Criteria for selection include the existence of the ponds and their immediate environment in their natural state and the absence of

MAP 8

State Land Ownership

Base map by State Planning Office



the permanent effects of man's use of the land and water resources. The ponds should be characterized by good fishing, inaccessibility by two-wheel drive vehicles, and absence of structures. Activities which detract from the value as a natural source of recreation use would not be allowed. Examples are: (1) use of motorized vehicles; (2) road construction; and (3) erection of structures. Areas designated as remote ponds would represent about one-half of one percent of land within the Commission's jurisdiction. Other unique recreation resources which should be offered similar treatment include canoe routes, hiking trails, and certain coastal islands.

For most other recreation resources specific protection devices would not generally be necessary. Many non-intensive outdoor recreation activities can occur concurrently without interferring with other uses or harming natural resources.

Snowmobile, all terrain vehicle, and trail bike use may create special problems with respect to damage to resources and conflicting uses. These activities are relatively non-intensive in that they require a minimum of support facilities, in some cases, not even a trail. However, they are sometimes in conflict with other non-intensive recreation activities and other resources uses.

There is incomplete, often conflicting evidence concerning the general impact of snowmobiles on a variety of environmental issues such as the effect of the point of interface between ground and snow which may affect soil properties and certain plants and wildlife, crop and young tree damage, air and noise pollution, litter and harassment of game.

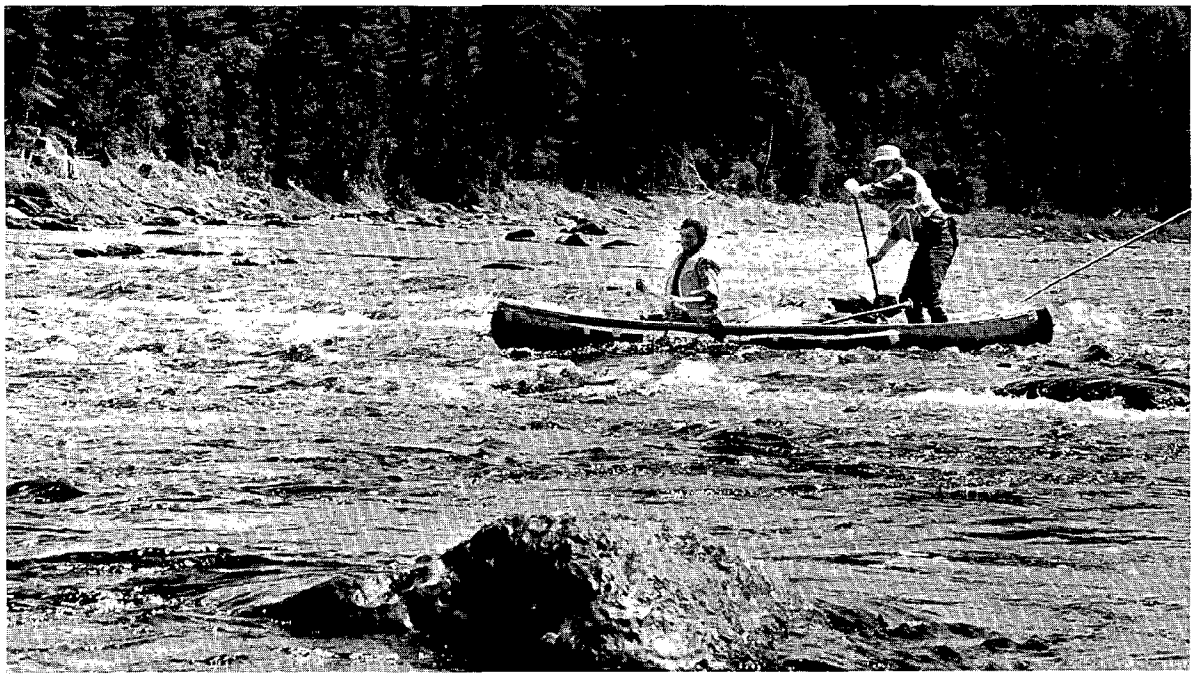
With respect to damage to soil, young trees, and wildlife, snowmobile use in the unorganized areas of Maine, where use is restricted primarily to unplowed logging roads and frozen bodies of water, would, perhaps, have fewer detrimental effects than elsewhere. Travel beyond areas such as this is difficult, if not impossible, in heavily forested areas.

An area where the use of such vehicles could have a very detrimental effect are sensitive areas such as high mountain areas. There, even slight disruption of the fragile soil and vegetative cover could result in severe erosion problems.

More intensive recreation development such as downhill ski and four-season recreation areas may be appropriate recreation uses under certain conditions in a limited number of cases.

Outdoor recreational activity, both intensive and non-intensive, has increased in the wildlands and coastal islands within the Commission's jurisdiction during the past decade and may be expected to continue to increase in the future. This is especially so as the economic situation becomes more stable. Over-use can result in recreation resources losing their value.

The Commission favors concurrent, non-intensive uses of recreation resources over exclusionary, intensive use. Public acquisition by appropriate



agencies to preserve natural areas and to provide for increased demand should be encouraged. The public lots provide an opportunity for recreation if managed on a multiple use basis. Public access and facilities on Great Ponds are necessary for the public to enjoy their legal right to fish, hunt and boat there. Land owner agreements to protect recreation resources should also be encouraged.

Mountain Areas

The climate of mountain areas in the jurisdiction is rigorous. Those areas comprising the very high parts of mountains have a lower arctic climate. The average annual temperature and the number of frost free days are lower, wind velocities and humidity are high, and precipitation is considerably higher in these areas than at lower elevations.

Soils are generally fragile being shallow, acidic and less fertile. Slopes are generally steeper at higher elevations, and there is a high erosion hazard.

The diversity of vegetation decreases with increasing elevation. This is a reflection of the rigor of the environment. Vegetative communities of low diversity are less stable than those of greater diversity. On the upper slopes the plant community is composed of sedges and grass-like plants which are sensitive to disturbance. On the lower slopes, the forest is made up of balsam fir, red spruce, and white and yellow birch species which are often slow growing and stunted because of the rugged environment.

Mountain areas comprise some of the most spectacular scenery in the state and region. These encompass some of the last remaining wilderness areas in the Northeast. They also have value as wildlife habitat and are the site of certain unique plant (e.g. Great laurel) and animal (e.g. yellow-nosed vole) communities.

Land uses in mountain areas can pose problems related to the characteristics of the resource and its value in its natural state. One use is for recreational and second home development. Yet soils in these areas are generally unsuitable for sewage disposal, the use of septic tanks can result in degradation of water quality and construction results in soil disturbance with high erosion potential. The costs of construction and maintenance is usually high because of the steep slopes and erosion hazards. Development can impair the visual quality of these areas and decrease their value as wilderness and wildlife habitat.

There are environmental constraints which inhibit the use of mountain areas for timber production. The most important limitation is soil. Road construction and skidding operations disturb the soil which has high erosion potential. Once erosion has begun, it is hard to check because regeneration of the few natural species of plants is slower than at lower levels and the steep slopes accelerate erosive forces.[17]

Mountain areas are a source of abundant high quality water. Mountain soils hold large quantities of water which result from the high level of precipitation. The water filters through the soil and eventually adds to stream flows, springs, and ground water supplies in valleys. An abundant supply of clean potable water is one of the state's most significant resources and its economic benefits are invaluable.

Non-intensive recreation is another use for mountain areas and one for which there is increasing demand. Generally this type of activity is compatible with the characteristics of mountain areas and with their use for scenic values, wilderness values, wildlife values, and water source values. However, it should be recognized that soil compaction, loss of vegetative cover and erosion can result from heavily used trails and that limits to use may be required in the future. Intensive recreation uses such as ski development and four-season resort development often occur in mountain areas. These have potential to degrade the resource and require some form of regulation to ensure the public interest is served.

Public ownership of mountain areas is limited. Acquisition of additional public lands in mountain and surrounding areas could insure future public access and would guarantee greater control of the resource.

Wildlife and Fisheries

The wildlife and fisheries resources of the unorganized areas contribute significantly to the economic, environmental and social welfare of the people of Maine.

Wildlife

A large number and diversity of wildlife species are supported by the many habitat types within the Commission's jurisdiction. Some species are common to that area, some use the available habitat while on their annual migration, and some rare species are supported by rather unique habitat types found there. The many species which utilize this area may be classified as big game, small game, fur bearers, migrating game birds, non-game birds and mammals, and rare wildlife. The diversity of habitat necessary for this variety of wildlife is furnished by different forest types, by

wetlands, by mountain areas and by coastal and inland islands.

The primary problem affecting wildlife resources in the future will be the maintenance of habitat necessary for the maintenance of population levels. The interspersion of food and shelter producing vegetation, escape cover, and breeding habitat are essential to most species. Physical alterations to the landscape can destroy the delicate balance of land cover which provides the necessary habitat conditions for specific species of wildlife. Certain habitat types such as wetlands, deer wintering areas, and coastal nesting islands are of particular concern because of the dependence of various species upon these habitats for survival. Of greater importance in many cases is the overall quality of the total habitat. This is generally affected by the mix of cover types needed to support wildlife resources. Intensive timber harvests affecting vast acreages and development in critical habitats can destroy the diversity of cover types and hence, the quality of existing wildlife habitat. Single alterations to habitat may not have a dramatic effect on wildlife resources, but the cumulative effect produced by several such changes may have a major influence on the overall quality of habitat and the land's ability to support a wildlife resource. For example in the case of colonial nesting sea birds, a small project on an island could disrupt the entire colony.

Use of persistent, non-biodegradable, and non-selective chemical pesticides presents problems to the survival of wildlife. Such chemicals may alter habitat, may cause direct mortality or may alter genes so that reproductive capacity is reduced. Furthermore, substances used as emulsifiers for aerial application of chemical pesticides may be harmful to wildlife although effective as a pest management technique.

Fish

The unorganized areas contain a large number and variety of inland waters which support populations of 44 of the 51 inland fish species which occur in Maine. Each of the 44 species of fish has definite physical, chemical, and biological requirements. Water temperature, water chemistry (especially dissolved oxygen), suitable areas in which to reproduce, adequate supplies of necessary food, and the extent of competition from other species of fish are all factors which significantly influence the ability of a species to survive, and ultimately determine the distribution and abundance of fish species in Maine.

Many uses of land and water resources affect the quantity, quality, and diversity of aquatic habitat available for inland fish. These, in turn, influence the fishery resources and opportunities for fishing. As demands for forest products and outdoor recreation increase, and as the unorganized areas become more accessible, unregulated growth in these areas may not be compatible with the natural perpetuation of the variety of fish that currently exist there. Many of man's uses of land and water resources alter one or more of the basic physical, chemical, or biological characteristics of aquatic habitat. These influence the composition of fish species through changes in conditions necessary for survival of the less adaptable species, especially the coldwater game fishes. Thus uses of the land and water cause far-reaching, sometimes irreparable changes, in water quality and aquatic habitat.

A variety of forest practices, recreational development, and agricultural and mining operations, particularly in shoreland areas, influence water quality and aquatic habitat. Among them are:

a. Sedimentation which may result from logging, farming or other development activities. Sedimentation is not limited only to small areas, its effects can also be felt many miles downstream in a drainage area. Silt inhibits light penetration in the water necessary for photosynthesis. Sedimentation reduces the abundance and diversity of bottom-dwelling invertebrates and may reduce or eliminate suitable salmoid spawning and nursery areas.
b. Excessive deposit of logs and slash in stream channels which may restrict fish movements, smother spawning grounds, cause chemical changes in the water or change the course of stream channels, and destroy aesthetic values associated with natural surroundings.
c. The cutting of trees to the water's edge which permits much greater exposure to sunlight, causing the abnormal warming of waters, sometimes beyond the tolerance limits of cold water species.
d. Introduction of toxic chemicals from the use of insecticides, fungicides, and herbicides which may kill fish or essential aquatic organisms in the food chain.
e. Accelerated eutrophication from the use of fertilizers, from animal wastes, and from septic effluent.
f. Improperly placed culverts which may block fish movements.
g. New logging roads increase access to once remote areas, often increasing fishing pressure in nearby waters, especially small trout ponds, resulting in a decline in fishing quality.
h. Erosion of shorelines from extensive shoreland clearing.

Other uses of shoreland areas affect water quality and therefore, fish habitat. Filling, dredging and beach construction all eliminate existing habitat.

Permanent, solid structures in the water can change shoreline water and wind currents. This can result in erosion of materials from an area and deposition in new areas. For these reasons, all

permanent structures should be carefully reviewed for need, environmental impact, and alternative location. Wherever possible permanent structures such as docks, piers, etc. should be shared by several users thus reducing the frequency of their occurrence and the amount of disruption they cause.

Large-scale alterations, by their very size, are recognized as obviously destructive, but small-scale alterations are also vitally important because:

a. Any lake, no matter how large, is only the sum of all its small shore front lots.
b. Current trends indicate that eventually some alteration will be proposed on nearly all lake shorelines.
c. Some lakes may have only a small amount of habitat type which is vitally important to some species of fish or wildlife.
d. Since there is no measurable biological cut-off point to shoreline alteration, thorough protection is a necessity.

The control of water flows by the construction of dams for hydro-electric, flood control, or irrigation purposes directly alters aquatic habitat, and affects or changes fish species composition often, although not always, detrimentally.

a. Dams obstruct fish movements.
b. Fluctuations in stream flows and lake levels influence fish movements and reproduction.
c. Artificial flowages change aquatic habitat, the aesthetics of that habitat, and often distribution; abundance and composition of fish species.

Energy

The jurisdiction contains numerous sources and potential sources of energy — water, wood, wind and sun.

Maine, like other areas, faces problems because of its nearly total reliance on traditional, non-renewable energy resources. As part of an ongoing process, alternative energy resources for Maine are being considered with emphasis on the State's wood fibre resources.

Because of the energy shortage, it is important not only that the search for alternatives be ongoing, but that conservation be encouraged.

The actual energy consumption within the area is small at this time. Nevertheless, certain land use policies can conserve energy and lower development costs — e.g. concentrating development to lower transportation and transmission costs, and adequately insulating buildings.

While it is true that energy requirements for the unorganized areas are low, when viewed in a regional context, the area is relatively close to a large energy market, the Northeast United States. The area is, therefore, sometimes viewed as an ideal location for energy generating facilities serving the growing market.

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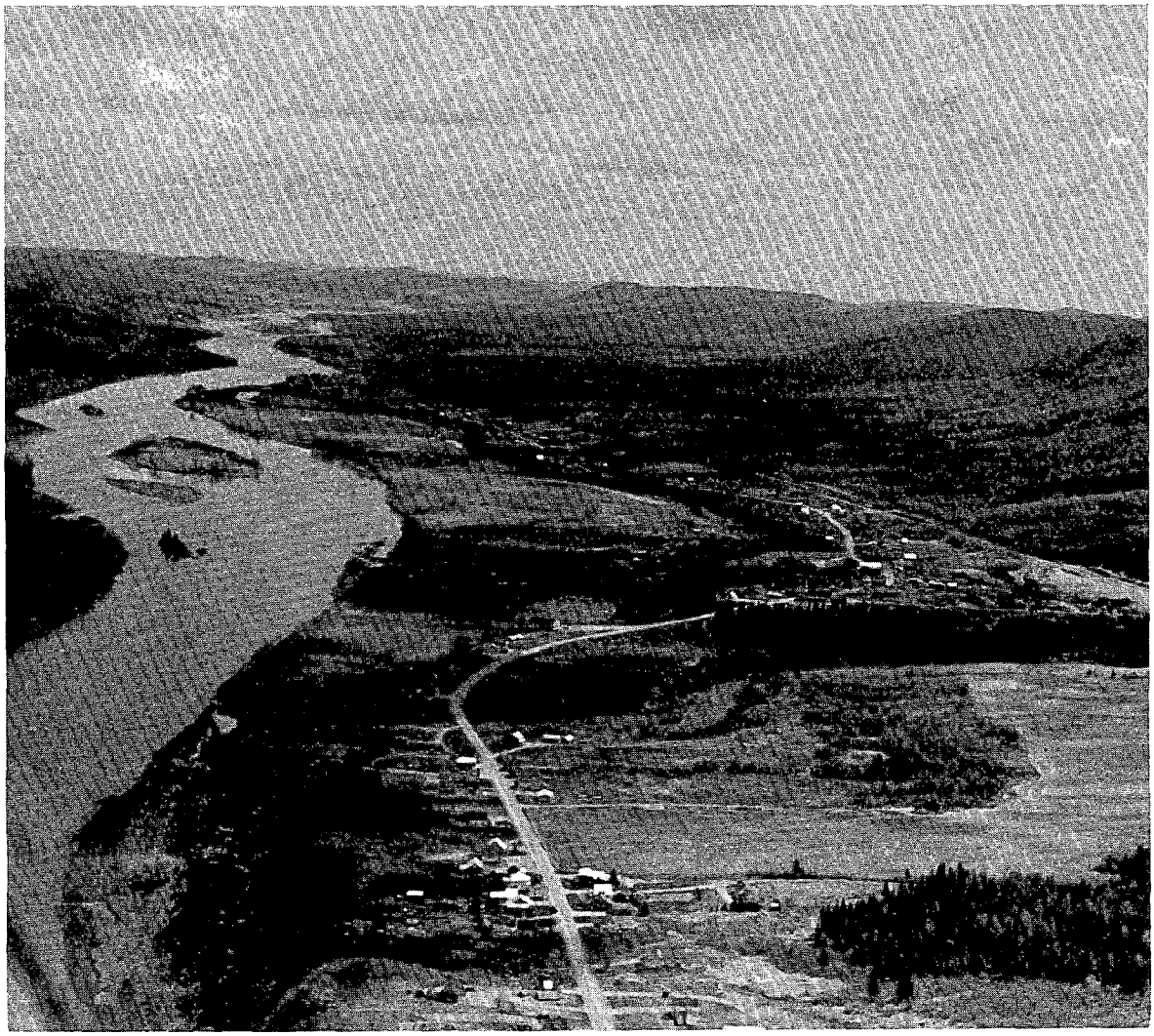


5 Development

Although sparsely developed, the unorganized areas of Maine are the location of a variety of different types of development. The Land Use Regulation Commission Statute charges the Commission with the responsibility of providing for appropriate commercial, industrial, residential and recreational development while, at the same time, preventing the occurrence of inappropriate, incompatible, or substandard forms of development.[1]

This section discusses existing patterns of settlement and the different types of development that have occurred: residential, recreational, commercial, industrial, public service, transportation, and waste disposal. Major development trends and public attitudes toward growth and development are also discussed.

The Development Policies in Section 6 or this Plan, the Recommended Land Use Districts in Section 7, and, ultimately, the permanent Land Use Standards are largely based on these findings. The findings in this section are summarized from research by the Commission during the past two years.*

Patterns of Settlement

History

Permanent settlement of the unorganized areas of Maine began in about 1800 and generally spread from south to north. The peak population for the entire area occurred about 1890. By 1929 when settlement was heaviest in the unorganized areas of Aroostook County, unorganized areas to the south were experiencing depopulation.

Early settlement took the form of subsistance farming. Large scale agriculture did not develop because of the rocky soil and short growing season; and the jurisdiction was never heavily settled because during the 1800's, when it was open for development, migration was occurring from Maine and the East to more suitable and cheaper agricultural lands and to mining claims in the Mid-West and West.

The typical settlement pattern was a rather rapid initial build up of population followed by a slow but substantial depopulation. Today some areas continue to depopulate slowly while others, especially plantations, have experienced rather rapid growth due to the spillover from nearby organized towns and to the expansion of recreational activities.

Early patterns of settlement are often reflected in present patterns of land ownership. Where an area was settled for agricultural activities, land was held in relatively small parcels. This was in contrast to the large and extensive holdings of land companies and speculators; today these large holdings are managed for pulp and timber production. The result has been that the smaller, individual land holdings serve as an outlet for

Papers based on this research are on file at the Commission's office. The full list of research papers is contained in Appendix B. The papers are available for public viewing during office hours.

small-lot, residential development when growth occurs.

Growth has resulted from a number of factors such as the location of nearby recreational facilities (primarily skiing), the existence of interesting natural features (primarily water bodies), proximity to population/work centers in organized towns, and improved access. Often these factors operate together to determine patterns of settlement.

Recent Growth Areas

Examination of the permits approved by the Land Use Regulation Commission since its inception points out five areas of particularly rapid growth. (See Map numbers 9 and 10).

1. Rangeley Lakes

The recreation resort nature of the Rangeley Lakes area, which includes Mooselookmeguntic Lake, Long Pond, and Saddleback Mountain Ski Area, provides the impetus to development in this region. Rangeley Plantation, Dallas and Sandy River are the areas where most new activity is occurring. A village of condominiums, an inn, and a commercial building have been added at Saddleback. New ski lift lines and trails have been approved but not yet constructed. Seasonal camps are the major development occurring, with a small percentage of permanent homes. Rangeley is the area around which most permanent housing is occurring primarily because of the availability of public services.

2. Carrabasset Valley

New growth in the Carrabasset Valley region is primarily recreational development. Sugarloaf Mountain Ski Area is the stimulus for most of this activity. New trails, ski lifts, snowmaking facilities, and condominiums have been added at the ski resort since 1972. Sugarloaf, Wyman, and Coplin Plantation are the fast growing townships in the region. Recreation oriented subdivisions, seasonal camps and vacation homes are the major component of approved building and subdivision permits. A few building permits have been approved for permanent homes.

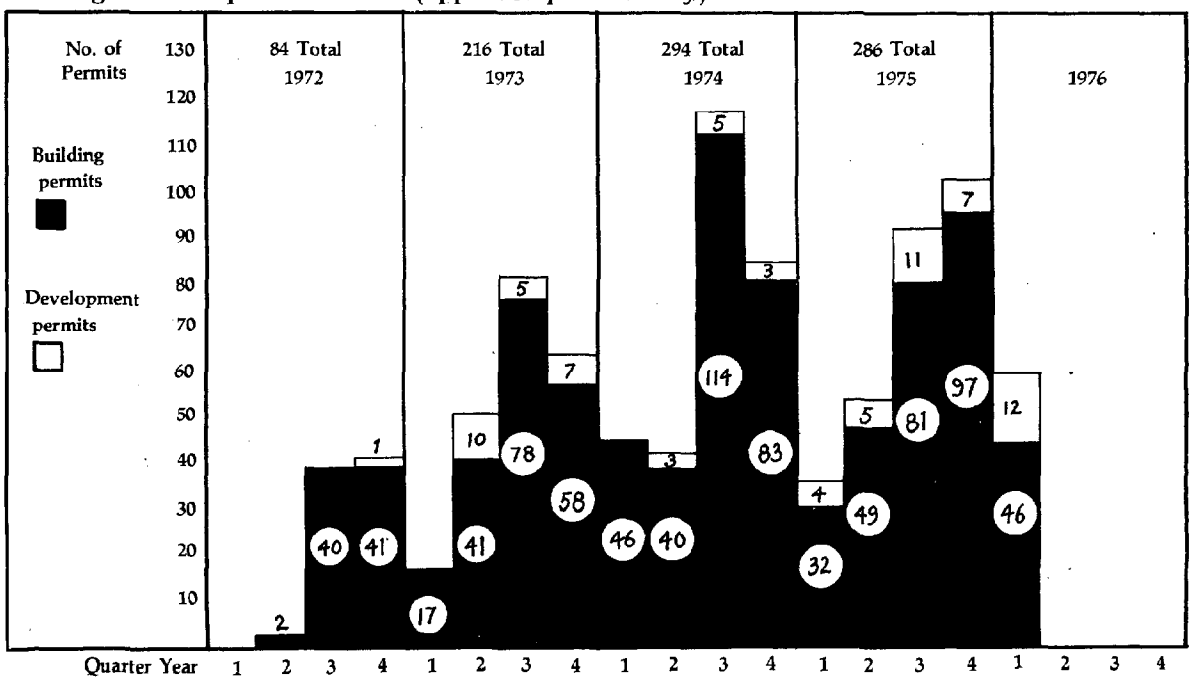
3. Moosehead Lake

Maine's largest lake is the attraction for new development in this high growth area. Most development is at the southern end of the lake, mainly at Harford Point and Beaver Cove. Other building activity has occurred in the townships surrounding the lake. Some of the subdivisions include condominium units and most have shorefront building lots. Most single family dwellings are seasonal camps and vacation homes. A few permanent homes have been approved in the region since 1972.

4. Northern Maine

The plantations and unorganized towns of

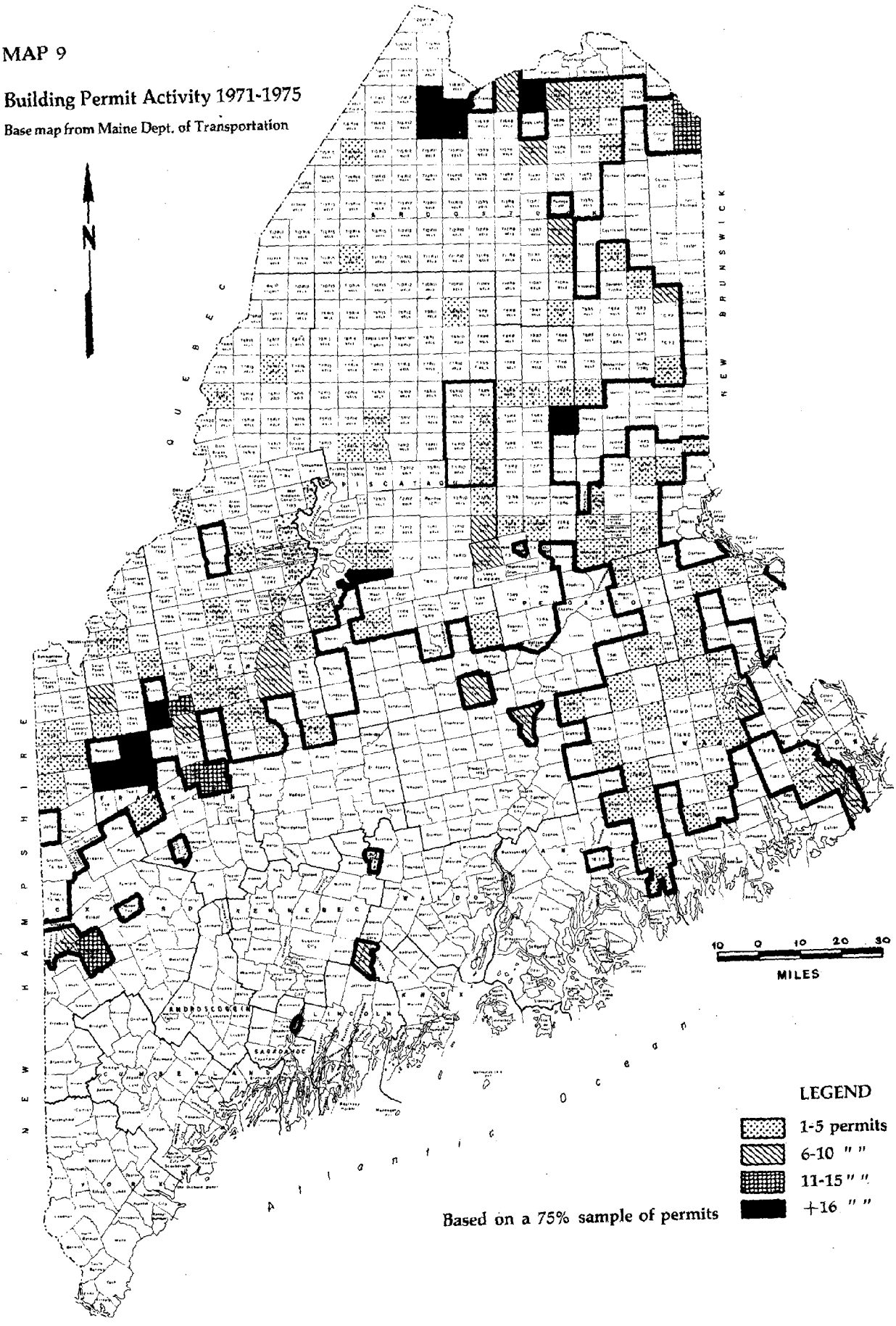
Building & Development Permits (approved permits only)



MAP 9

Building Permit Activity 1971-1975

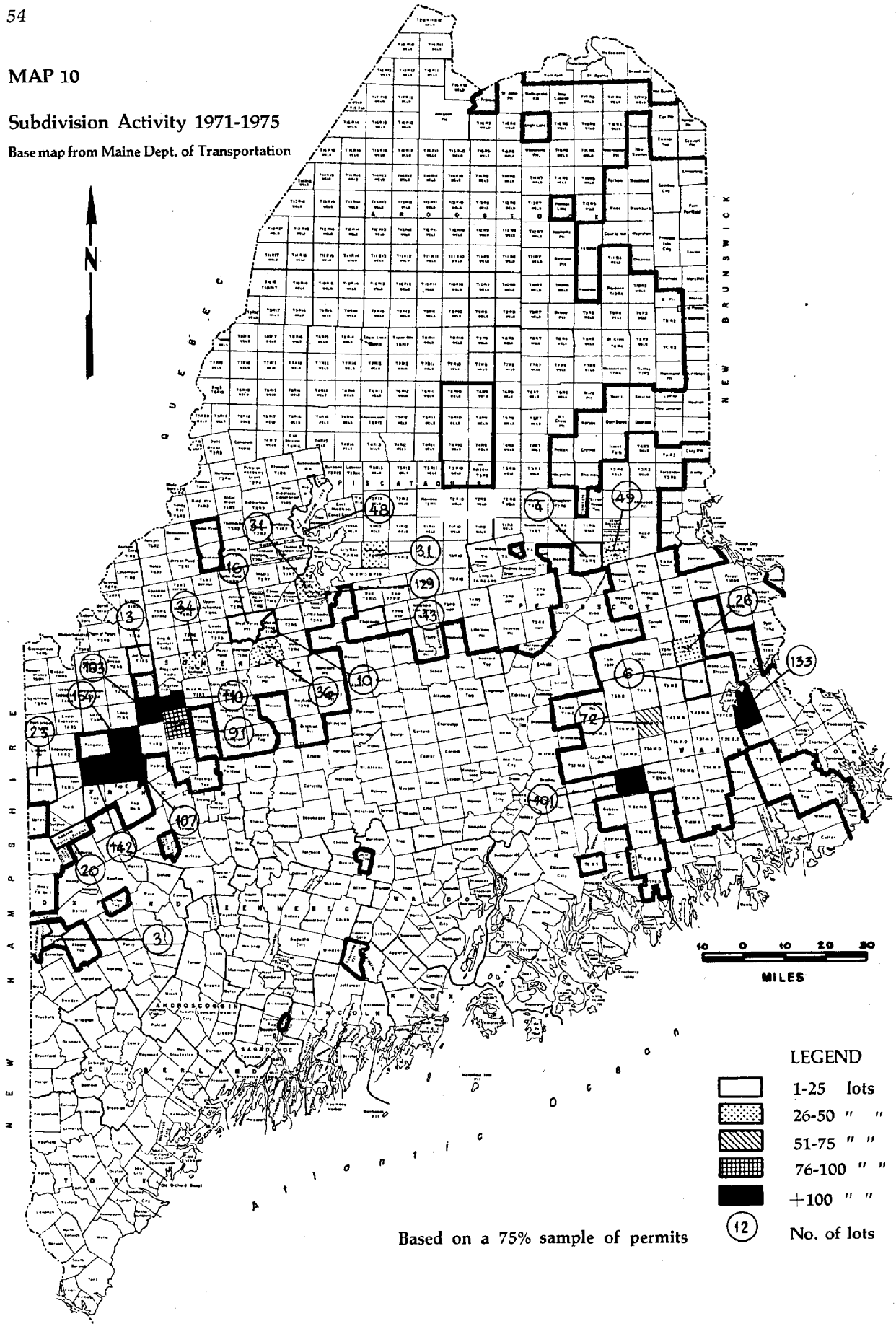
Base map from Maine Dept. of Transportation



MAP 10

Subdivision Activity 1971-1975

Base map from Maine Dept. of Transportation



Based on a 75% sample of permits

Northern Maine are closely associated with adjacent organized towns. Permanent single family home development is the major building activity. The townships with most construction activity are Mt. Chase, Nashville, Caswell, Connor, and Wallagrass. Pinkham Lumber at Nashville is the largest manufacturing establishment in the Commission's jurisdiction. It has made a number of additions to its plant since 1972. The area north and west of Caribou contains about one-half of the jurisdiction's permanent population.

5. Washington County

Development activity is occurring on a scattered basis throughout the unorganized areas of Washington County. Most of this is water related, recreational development.

Permit Data

Between mid-1972 when the Commission began processing permit applications and March 1976, the Land Use Regulation Commission has approved:*

- 865 building permits for single family dwellings
- 64 subdivision permits
- 73 development permits
- 129 forestry operations permits
- 14 bridge permits
- 8 road permits
- 8 utility permits
- 24 zoning amendments

The graph on p. 52 shows building and development permit approvals. It shows that most building permits are processed in the third and fourth quarters of each year. Building activity declines dramatically in the first quarter and generally begins to rise again during the second quarter.

The overall high for building permit approvals for a three month period occurred in the third quarter of 1974. That level has not been reached since. Nevertheless, the total for 1975 was also high and the total for the last quarter of 1975 was the second highest quarterly total. The total building and development permits approved for the first quarter of 1976 was the highest first quarter total ever. No overall trend in development permit applications is apparent.

A. Building Permits

Building permits constitute the bulk of the Commission's permit workload and single family dwellings form a substantial component of the growth occurring in the jurisdiction. 53.3 percent of the building permits approved by the Commission have been for seasonal or recreation dwellings and 46.5 percent have been for permanent housing. Based on 653 of the 865 permit approvals, the average lot associated with a single family seasonal dwelling is 9.3 acres and for a single family permanent dwelling is 22.8 acres. Map number 9 indicates areas of concentrated building activity based on approved permits to the end of 1975.

B. Subdivisions

When a land parcel is divided into three or more lots in any five year period, unless the lots are more than 40 acres, a subdivision permit is required.[2] Permits for 64 subdivisions have been granted as of March 1976.

It should be mentioned that the economic climate largely determines the extent to which subdivisions occur. For instance, two subdivision plans which have received Commission approval have been abandoned since 1974 due to the economic/energy situation. The demand for recreational housing and housing generally has fallen short of the high levels predicted in the early 1970's. This decline indicates the unpredictable nature of the growth pressure to which the unorganized areas may be subjected. It also demonstrates the need to plan for periods when the demand is high. Map number 10 shows the location and number of lots in approved subdivisions based on 45 of 64 approved permits.

C. Development Permits

Development permits are required for activities which do not fit into the categories of single family dwelling, subdivision, forestry operation, or utility, bridge or road construction. Such activities include dams, gas stations, grocery stores, ski resorts, apartments and condominiums, and other commercial and industrial activities.

The Form of Development

Only about two percent of the unorganized areas is considered "developed"[3] and the density of this development is extremely low even when compared to that in suburban areas.

At present, a few village patterns of settlement are emerging with commercial and resi-

**These figures are for permits approved; not all approved permits result in the occurence of the permitted activity. Staff estimates are that about 90 percent of approved permits are carried through actual construction. In addition, it is known that some building occurs for which permits have not been issued. It should also be noted that the figure for approved subdivisions includes some subdivisions which pre-existed the formation of the Commission but had unsold lots as of September 23, 1971 and were required to get permit approval.*

dential development interspersed in a relatively concentrated manner. Also, although housing continues to be the only distinct pattern of development, there are isolated instances of industrial and commercial development. Highway, railway, and utility line development areas also exist. The following sections review these different forms of development.

Housing

The principal type of development in the jurisdiction is housing. The 1970 census indicated that 13,507 housing units were located in the jurisdiction. Judging from building permit data that figure is probably about 14,500 units in 1976. In 1970, 5,035 units were in plantations and 8,472 were in unorganized townships. Data from the 1970 census indicates that about 27% of housing in the jurisdiction was permanent, year round housing and about 68% was recreational (or seasonal). Most year round housing is located on the roadside of well maintained highways while most seasonal housing is single lot development or sites on the lake shores of the area. There almost all housing development is linear in form.[4] Census figures also indicate that plantations have a higher ratio of permanent homes to recreational homes (1:1.5) than do unorganized townships (1:3.7).

A. Housing and Recreation

The resources of the region offer many recreational opportunities. Seasonal housing is closely related to the enjoyment of recreation, and a majority of the housing in the Commission's jurisdiction is used for recreation purposes. There is often, however, a conflict between the conservation of natural values that support and enhance outdoor recreation and the development that supports the recreation opportunity. For example, inadequate provision for sewage disposal for housing can be a major contributor to the degradation of water quality; housing right on the shoreline can create a visual intrusion that reduces the natural quality of waterborne recreational activities; and furthermore, shorefront development can be disruptive to shoreline soil and plant life.

Unplanned roadside strip development can degrade the visual experience of road travel and decrease road safety. In most cases the visual impact of roadside and shoreland housing can be reduced by setting the structures back and utilizing new or existing landscape features as a screen.

Snowmobile trail riding, trail hiking, wilderness camping and other recreational activities associated with the enjoyment of the natural outdoors are damaged by the intrusion of housing into areas used for these activities.

B. Structural Aspects of Housing

The design and condition of the house itself influences the living environment of its residents and neighbors. Furthermore, the Commissions enabling statute requires that all development fit harmoniously with the natural environment and that adequate provision be made for solid waste disposal.[5]

Housing structures in the jurisdiction can be categorized into two groups — conventional or industrialized (including panelized, pre-fabricated, modular or mobile homes).

Using the characteristics of rural housing in Maine as a model it is probably safe to say that of all the year-round housing in the jurisdiction:

- 85% have septic disposal systems or are connected to a public sewer;
- 21% lack some or all plumbing facilities;
- 60% are more than 30 years old.

Because of the relatively old age of much year-round housing, problems can be expected with sewage disposal systems.

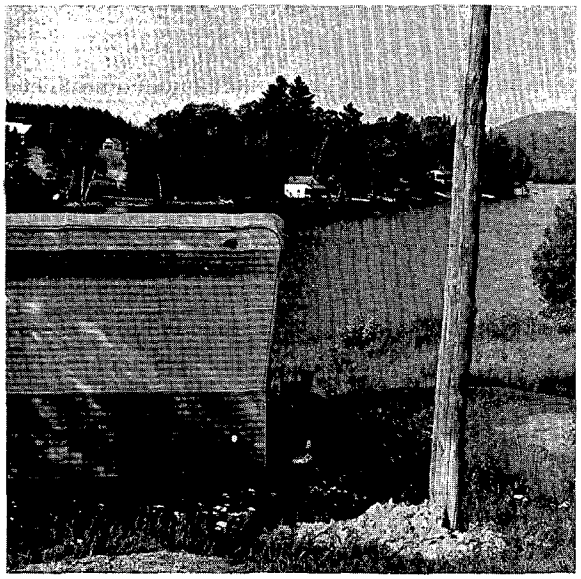
Recreational housing units are often of small size and lack some or all service systems (water, electricity, heating, etc.). Much recently established recreational housing, however, in such areas as ski resorts and high value waterfront areas, is essentially a second home with permanent home characteristics. Many recreational units are prefabricated, while many are also owner designed and built.

The type of industrialized home most commonly encountered is the mobile home. Modular homes are fairly common in the northern and eastern extents of the jurisdiction (Aroostook and Washington Counties).

C. Public Services and Housing

Water supply is necessary for both normal living activities and for fire fighting. Most people have individual wells, or carry at least a portion of their water to their home and rely on surface water for the remainder of their needs. Few housing units have public water supplies. The availability of water is not a problem, but the quality of available water is frequently a problem in agricultural areas and areas of high densities of on-site sewage disposal.

There are no State permit requirements for the establishment of new individual wells (other than distance from an effluent disposal bed). Subdivisions where each housing unit requires an individual well do not normally have provision for a supply of water for firefighting purposes.



Most recent large-scale recreational and housing developments have a public water supply for living and fire-fighting purposes.

Most permanent homes and many recreational homes are served with electricity and telephones, however, a substantial percentage of recreational homes still have neither service. The provision of these services means that there is:

- visual impact from above ground distribution lines, normal clearing practices along such lines, and aerial delivery to islands; and
- an increase in amount of sewage generation that results directly from the provision of electricity and use of electric water pumps.

D. Transportation and Housing

Access to most housing units is by motor vehicle, although there are a substantial number of recreational housing units on waterfronts or islands that utilize boats or occasionally seaplanes for access.

The two most significant problems resulting from the interface of transportation with housing is that the units are often too close to the road and when closely spaced have driveways that can create hazards for motorists on through routes. Also, many housing sites lack an off-road parking.

Recreational Facilities

Recreational activities can be classified as those that require substantial support facilities, e.g. downhill skiing, and those that require a minimum of support facilities, e.g. hiking or snowmobiling.

Examples of recreational related development occurring in the jurisdiction are recreational housing, campsites, picnicking, and swimming areas, roads and trails for hiking, snowmobiling and ski touring, boat launching facilities and downhill ski areas. Recreational development has a substantial economic impact in certain areas. Nevertheless, based on opinion surveys there is strong sentiment on the part of Maine citizens that most development be prohibited from certain areas, preserving them for primitive recreation.[7]

There are 643 publicly administered campsites in the region. There are also 644 known private campsites. Most of the private sites are administered by North Maine Woods, a consortium of land owners and public agencies.

There are 833 picnic tables, 70 swimming sites, and 51 boat launching sites in the Commission's jurisdiction which are maintained by public agencies. The figures for privately maintained facilities are sketchy although it is known that North Maine Woods and other land owners and managers maintain some facilities.

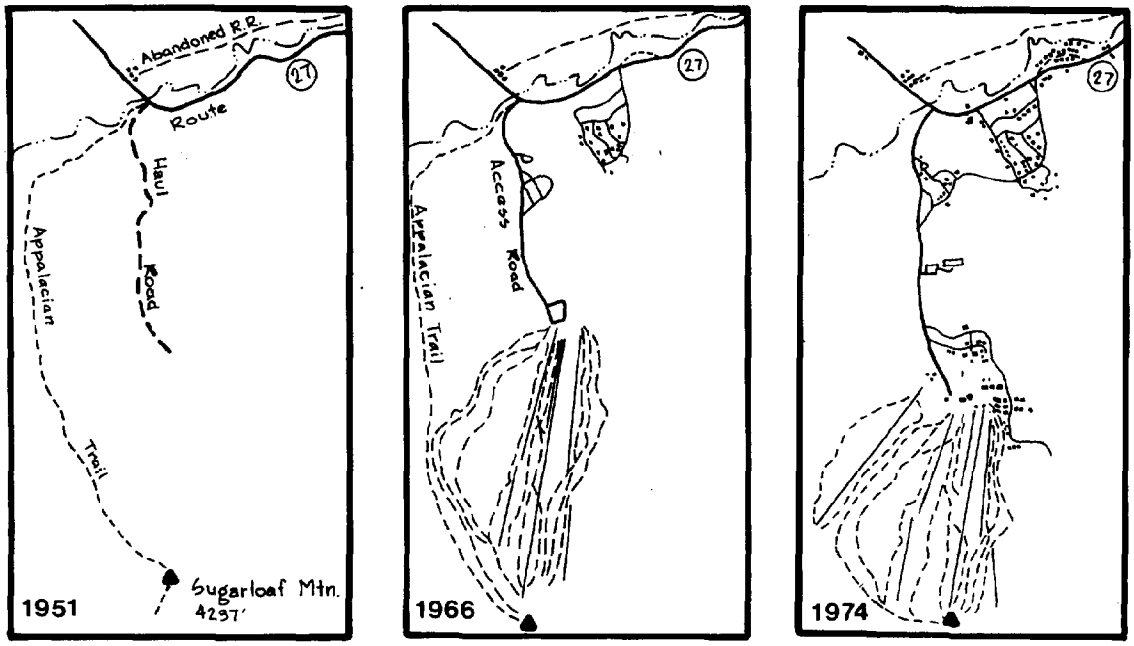
There are 322 miles of publicly administered hiking trails in the jurisdiction. The most heavily used of these are in the White Mountain National Forest. In addition, there are about 848 miles of trail maintained over private land, mostly maintained by the Appalachian Mountain Club and the Appalachian Trail Club. Most of the land is owned by pulp and paper companies.

There are about 200 miles of publicly administered snowmobile trails in the unorganized areas. Furthermore, there is a large, but unknown, number of miles of snowmobile trails existing on private property. Many hiking and snowmobile trails are also available for ski touring and snowshoeing. In addition to these a smaller but growing number of trails are set aside for cross country skiing alone. The number is not known.[8]

In terms of intensity of use and impact on the economy of the region the primary type of recreational development is ski resorts. There are three ski resorts currently operating within the Commission's jurisdiction. They are Sugarloaf Mountain Ski Area in Carrabassett Valley, Squaw Mountain Ski Area in Big Squaw Township, and Saddleback Mountain Ski Area in Sandy River Plantation. Squaw is state owned.

In addition to mountain side trails and a base lodge at the foot of the trails, each of the three ski areas has support businesses on site or nearby. The ski associated businesses include restaurants, snack bars, ski shops and ski schools. These ski areas either offer or plan to offer overnight accommodations.

The major ski resorts have generated secondary development, primarily along transportation



Sugarloaf

Development Growth 1951 - 1974[9]

The diagrams above illustrate the land use changes that have occurred on the north slopes of Sugarloaf and Route 27 since 1951.

In 1951 the predominant land use was forestry. Bigelow Station on Route 27 existed as the terminus of an abandoned logging railroad and a logging road ran to the base of Sugarloaf. The Appalachian Trail was located west of this haul road and reached the summit of the Mountain.

By 1966 the Sugarloaf ski area was in existence with three lifts and a variety of trails. The haul road became the area's access road and a subdivision of second homes for skiers had begun. Route 27 had been realigned creating several cut-off sections and there was a conflict of use on the Appalachian Trail.

In 1974 this conflict had been resolved by the relocation of the Trail. The ski area had grown with the addition of lifts, more base facilities and condominium units. Subdivision activity continued with the expansion of earlier development and the location of lots on some of the old Route 27 cut-offs.

The indications are that growth will continue in the area.

corridors beyond the resort proper and within easy driving distance of the base lodge. Spin-off development is residential and commercial in nature. Most of the residential development is seasonal. There is, however, an increasing trend to conversion toward permanent residences.

A new ski area or major expansion of an existing area creates a demand for public services such as road maintenance, police and fire protection, and refuse collection. This demand can drastically change the local tax base.

One example of the type and extent of recreational development generated by a ski area is shown above. It depicts the Sugarloaf Mountain area at three stages of development.

From the foregoing, it is clear that ski resorts can function as nuclei for a surrounding pattern of fairly intensive development.

In addition to the development impact, ski resorts have considerable impact on the environment: Creation of ski trails and building activity on steep slopes with shallow soils may cause erosion problems. Moreover, ski areas have definite visual impact upon their surroundings.

Commercial and Industrial Development

The extent of both commercial and industrial development within the Commission's jurisdiction is limited.

Commercial activities are of two types: (1) recreational oriented lodging and activities such as restaurants, commercial sporting camps and ski facilities; and (2) general services such as gas stations and general stores.

Many settled areas in the jurisdiction rely upon nearby organized areas for needed commercial services.

Where they do occur, commercial activities often contribute more to the adverse effects of linear development than do normal residential uses. They tend to be visually prominent, are seldom landscaped and make little provision for

adequate and safe parking or access and egress. They depend upon close proximity to highways, good access and higher traffic volumes. Outdoor advertising is widely used and often has a negative environmental impact. Some of the adverse effects of commercial activities can be minimized by controlling access, landscaping and avoiding sprawl.

Industrial development in the unorganized areas is limited to wood products. Chipping mills and sawmills of varying size and type are located in Nashville Plantation, Allagash Plantation, Drew Plantation, and Highland, Holeb, Edmunds and Caratunk Townships.

A number of small, home-oriented manufacturers such as toy makers, potters, weavers, and furniture makers also operate in the jurisdiction.

Commercial extraction of minerals does not presently play a major industrial role.

Historic Development

Development of Maine's "wildlands" has over time produced a variety of historic, archaeological, architectural, and cultural resources in the jurisdiction.

Most of the known historic resources are related to the timber industry. They include a canal (the Telos cut), dams, narrow and standard gauge railroads, sluiceways, and logging settlements. Other historic resources include archaeological sites and Indian trails, architectural sites, military fortifications and objects (such as the Arnold Trail and old fortifications), and historic commercial and industrial sites (such as Katahdin Iron Works).

Historic resources are directly or indirectly threatened by the following:

- improperly conducted timber harvesting, and development which can destroy the character of historic trails, sites and objects;
- increased use of historic resources which increases the likelihood of their being damaged or destroyed by abuse, overuse, and vandalism;
- the legal and fiscal inability of the Maine Historic Preservation Commission to implement effective preservation programs;
- the lack of effective preservation programs at the state level involving tax relief and historic trust instruments;
- the lack of clear statements of policy concerning Historic Resources; and
- the lack of coordination among the
- agencies of the State of Maine relative to their policies concerning historic resources.

The protection of Historic Resources by the Commission is made extremely difficult by the fact that no comprehensive inventory of Historic Resources in the Commission's jurisdiction exists.

Public Services

Human settlement and land development give rise to a demand for certain services such as waste disposal, road maintenance, fire and police protection, schools, etc. These services are typically provided by local governments.

In the unorganized townships, the County Commissioners provide for services including:

- establishing and maintaining solid waste disposal areas;
- road maintenance including snow removal; and
- fire protection, other than forest fire protection.

Plantations, which possess limited governmental authority, have the power to raise taxes to provide services for themselves.

Some services, especially health care, fire protection, and education are frequently provided by a nearby organized municipality on a contract basis. However, residents in the more remote areas of the jurisdiction are far from many public service facilities.

Forest fire prevention is provided by the Maine State Bureau of Forestry. County sheriffs and deputies, the Maine State Police, and police at the plantation level provide police protection. Public education is available to all residents, either from state operated schools or adjacent school administrative districts.

Development increases the demand for public services, yet it is clear that the existence of certain public services, especially roads and utility lines, influences where development occurs. Furthermore, the encouragement of new development adjacent to existing development or where adequate public services exist reduces the cost of supplying these public services. Such grouping of development is also a sound land use policy in that it reduces sprawl which is costly economically, environmentally and visually.

Despite the foregoing, it is also clear that development activities will occur in areas away from existing development that have no existing public services. In such cases, the Commission will ensure, not only that the proposed development meets the other requirements of the Land Use Regulation Statute, but that the demand for public services engendered by that proposal can and will be adequately met.

Transportation

Land use is dependent upon access. Transportation facilities are, therefore, prime determinants of when and where development will occur.

There are about 8,000 miles of roads in the Commission's jurisdiction — about 1,500 are public and the remainder private.[10] There are three rail systems — one of which provides passenger service on a limited basis. Five bus routes pass through the region and three major freight carriers serve the general area. There are five non-commercial airports, and three commercial and four non-commercial seaplane bases in the area.

Roads have the greatest, practical, day to day impact on land use and development. Map number 11 shows the percentage of increase in use for various public roads to and in the jurisdictional area.

The majority of roads in the unorganized areas are private and they have a tremendous impact on development. This impact is likely to increase as a result of the cessation of log driving on Maine rivers and the construction of new logging roads. This will open previously inaccessible areas to new development where other components of growth are present.

Waste Disposal

Waste disposal includes the treatment and discharge of private and industrial sewage, agricultural waste, and private and industrial solid waste.

The most common method of sewage disposal in the jurisdiction is private on-site sewage disposal. Malfunctioning sewage systems can contaminate the ground water, contribute to public health hazards and accelerate the eutrophication of adjacent bodies of standing water.

The Land Use Regulation Commission has adopted the State Plumbing Code as the model for dealing with the on-site disposal of private sewage. Its statute also requires that development meet the standards of the Soil Suitability Guide for Land Use Planning in Maine.

There are some soils that are completely unsuitable for on-site sewage disposal or solid waste disposal from an engineering, economic and environmental standpoint. These are flood plan soils and organic soils such as peat and muck. Neither the Plumbing Code nor the Soil Suitability Guide permits sewage disposal on these soils. In addition, there are groups of soils which require special consideration before they can be used for either sewage or solid waste disposal. These groups include soils with high seasonal water tables, extreme shallowness to bedrock and either slow or rapid permeability. Substantial alterations may render these soils suitable for on-site sewage disposal, but such alteration may result in unacceptable changes of the on-site environment. The cost of installing and maintaining an acceptable system may also be prohibitive.

Because of their limited carrying capacity coastal islands present a unique situation within the Commission's jurisdiction requiring special attention. On-site sewage disposal on the islands may seriously damage drinking water quality. Ocean disposal of treated effluent requires Department of Environmental Protection approval.

Major Development Trends

Whereas the steady, continuous growth of development in the jurisdiction evidenced by permit applications processed by the Commission is easy to document and is controlled to some extent by interim districting and land use standards, individual, major development proposals are less easy to forecast and/or control. Certain trends, however, are evident and, when seen as a whole, indicate that considerable new development will occur. These growth trends may be described under the following headings:

Commercial Forest Utilization

High intensity forestry practices, the availability of new cutting and hauling equipment, and increased demand for paper and wood products are beginning to affect the unorganized areas.

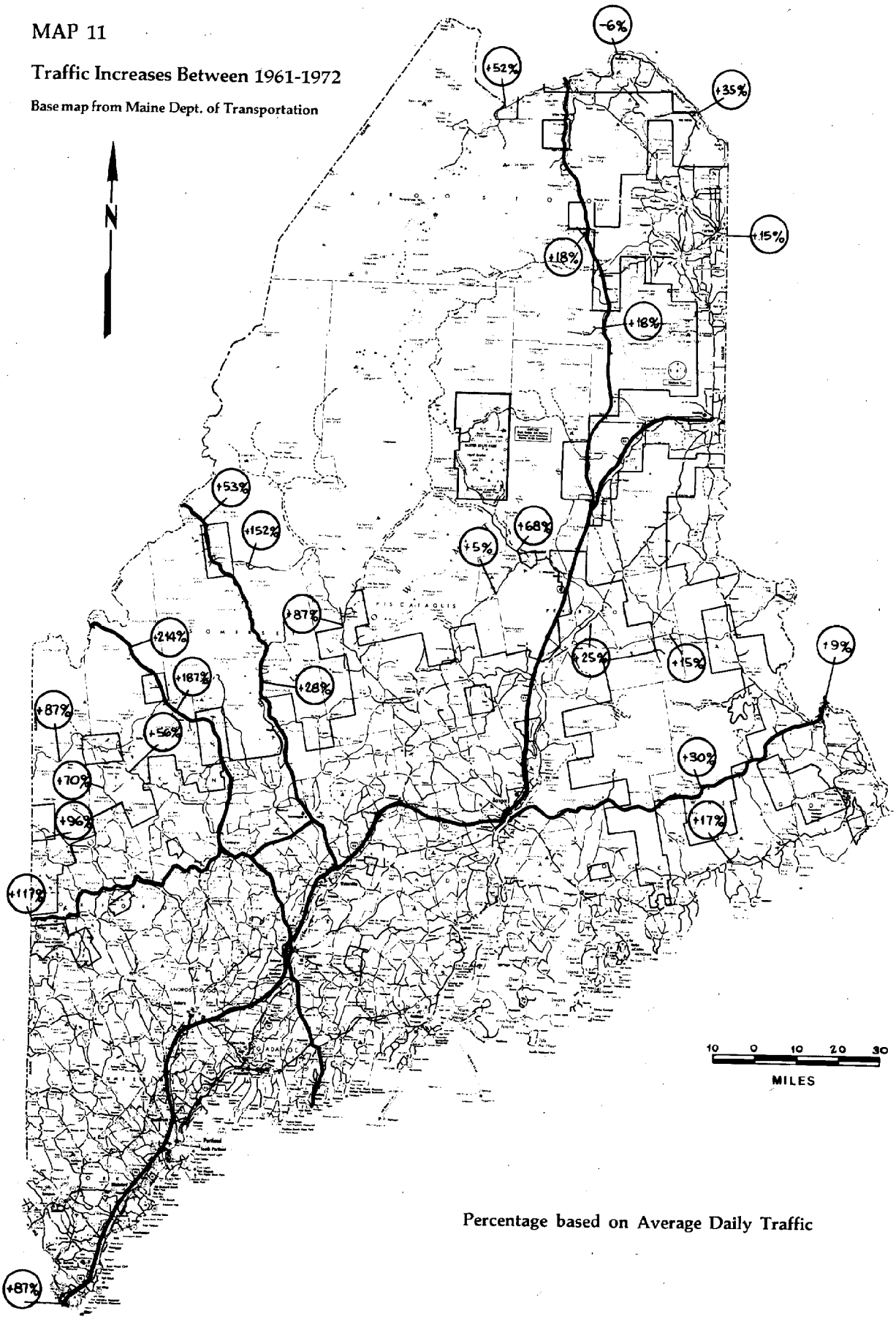
The trend in timber production is toward more intensive management. Clearcutting is used as one harvesting procedure. Planting of genetically improved trees followed by fertilization and chemical herbicide treatment to remove undesirable growth is in the research stage and may come into practice. Complete tree utilization, including roots, branches, and leaves is being considered.

Indications are that this trend will continue and intensify. It becomes increasingly necessary to gain ground on the natural growing process and to shorten the cutting cycle in order to have trees available to meet future demand. Ultimately intensified forest management may be required necessitating new permanent settlement and development to ensure the availability of the work force and facilities to carry out that management. Such new development would certainly change the character of what is now managed forest land. Means to guide this type of development should be established.

MAP 11

Traffic Increases Between 1961-1972

Base map from Maine Dept. of Transportation



Percentage based on Average Daily Traffic

There have been a number of technological innovations resulting in the increased mechanization of timber production. The wheeled skidder has had a great impact in that it has reduced the amount of bull-dozed road construction necessary for logging, and with it the erosion associated with those logging roads. Nevertheless, poor skidding practices can increase soil erosion and sedimentation and thus affect water quality, wildlife habitat, and recreational opportunities.

With the abandonment of rivers as a means of transport and longer skidder trails and larger trucks, more permanent roads are being constructed. These are making and will increasingly make, more lakes and remote areas accessible and, therefore, developable.

Finally, recent trends also suggest increased milling of wood and the possibility of mills in the jurisdiction. Furthermore, new markets for wood chips are developing. Such trends could create new job opportunities and lead to more permanent settlement.

Recreation

In addition to recreation related housing, two types of recreation activities are expected to put further demand on the resources of the unorgan-

ized areas: non-intensive recreation and "four-season" recreation. Nationally, and in Maine, hiking, camping and canoeing are becoming more popular. The trend is putting more pressure on the trails and streams of Maine. Snowmobile and ski touring trails are likewise on the increase in Maine. These trends point to the value of the jurisdiction as an important recreation resource, but also show the need for protection and control. These trends are accelerated by ski developments that are being designed for, or converted to, four-season resorts in order to broaden their economic base. The four-season approach emphasizes increased trail use for hiking and camping, and the use of nearby surface waters for boating and canoeing.

Beyond that, both non-intensive and four-season recreation create demand for other development and supportive services such as shelters, camps, motels, housing, ski lifts, etc.).

Energy

The energy crisis has precipitated an intensive effort to find efficient, low-cost sources of power. Areas within the Commission's jurisdiction offer both wood and water as potential energy sources. Five Maine sites have been identified as potential pump storage generation sites by the New England River Basin Commission Study Task Force and all are in the Commission's jurisdiction.[11] Nuclear power is often mentioned as a solution to the energy problem. The unorganized areas offer some of the characteristics cited by the Nuclear Regulatory Commission as desirable for the location of a nuclear power plant or center. The Saint John River is presently being studied as a possible site for hydro electric power generation, and other similar proposals are possible.

All of this suggests that more intensive use of the resources is inevitable and point to the need for establishing a means for dealing with major energy development proposals which fall outside presently developed areas.

Mining

Modern technology continues to find more efficient, cost effective means of extracting mineral resources. Copper, iron, peat, sand, and gravel are known to exist within the Commission's jurisdiction. When it becomes economical to mine these or when shortages occur and demand increases, new development is certain to follow. A balance must be sought between the utilization and the need for protecting these and other non-renewable resource values.

Summary of Major Development Trends

The preceding paragraphs indicate that more intensive forest management practices, new roads, increasing recreation, the search for less expensive renewable sources of energy and new mining technology will place the unorganized areas under new stresses and may act as the catalysts for further growth and new development. They show that there will be proposals, particularly from the private sector, to develop major projects. Recognizing that such projects may contribute to economic well being but may, in some cases, conflict with the "public interest", means to resolve the conflicts, and provide a mechanism for evaluating worthy development proposals falling outside of existing development areas, must be sought.

Public Attitudes Toward Growth and Development

Section 681 of the Land Use Regulation Statute states, in part: "...the Legislation declares it to be in the public interest...to encourage the appropriate use of these lands by the residents of Maine..." An important element in determining the appropriate use of any land use is the attitude of the affected public toward that use. For the purpose of determining public attitude, the Land Use Regulation Commission undertook two surveys designed to shed some light on the uses favored by the people of Maine. The first of these opinion surveys questioned lessees in the unorganized townships on their attitudes toward growth and development. The second questioned residents statewide on the same issue. The results of these surveys are summarized below.

Lessee Attitudes

There are approximately 6,200 leased parcels of land in the unorganized townships of Maine. Lessees are not necessarily representative of the entire population of the area. They constitute a distinct group with their own special interests. Nevertheless, they have a stake in what affects their property interest. For that reason, their opinions are of interest to the Commission.

With the special characteristics of lessees in mind, the Land Use Regulation Commission surveyed lessees in 1973. They were questioned on a variety of subjects including their attitudes toward development. In part the survey indicated,

based on a return of 485 questionnaires (26%) that:

- An overwhelming majority enjoy the woods because of "quiet and solitude" the "wilderness atmosphere", and fishing and hunting opportunities.
- 78% of those surveyed said they foresaw changes toward greater recreation and more development of the timberlands and 72% felt that these changes were detrimental.
- 89% of the respondents felt a need for regulation of "wilderness use".
- 71% supported state purchase of "significant wildland areas" to maintain their undeveloped character.

In sum, persons leasing land in the unorganized townships enjoy it for its values, are reluctant to see more development which they feel would lessen these values, and support both regulation and possible state acquisition to ensure the preservation of the "wildlands".

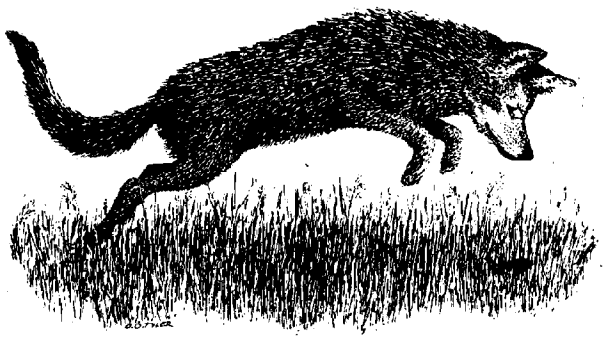
Public Attitudes

In April, 1974, the Land Use Regulation Commission, through a survey designed by a public opinion survey consultant, polled a representative, state-wide sample of residents to determine their attitudes toward growth and development within the Commission's jurisdiction. That study indicated in part that:

- Maine residents, as a whole, favor recreational uses of a seasonal and minimally disruptive nature (hiking, camping, skiing, snowmobiling) for the plantations and unorganized townships.
- Residents of the jurisdiction favor development related to area resources (such as sawmills and wood-working plants), non-resource industries (such as electronic plants and shoe factories), and year-round housing over small camp, large second home, large resort, and motel and restaurant development. They also strongly support hiking, camping, and snowmobile related development.
- A clear majority (+61%) of Maine persons want the State to improve access to the unorganized areas.
- A high percentage (+80%) of State residents feel that "some of the areas should remain undeveloped".
- A high percentage (84%) of Maine residents also feel that additional development should be confined to a limited number of selected areas. There is, however, no clear cut feeling on where future development should be located. The statewide split (48% to 33%) and the split among residents of the jurisdiction (42% to 36%) in favor of locating near existing development as opposed to separate from existing development are clear enough to conclude that any development proposed for a previously undeveloped area must be judged on its own merits.
- At least 88% of Maine residents feel that certain "wilderness" areas, lakes, and rivers should be set aside for primitive recreation only.
- Over 95% of the respondents feel that preservation of the wildlife and fish populations is essential.

In summary, a majority of Maine residents prefer non-intensive, recreation related development activities such as hiking trails and campsites, campgrounds, and snowmobile trails over more intensive development such as large resorts, motels, restaurants, and second homes. There is very strong support for keeping some areas completely undeveloped — particularly those suitable for primitive recreation and wildlife habitat, while confining development to limited, selected areas.

Public attitudes may vary over time. For that reason it would be helpful to the Commission to have a professionally prepared survey form to administer periodically — perhaps every two years — to keep up to date with the opinion of owners, managers, and citizens on development issues.



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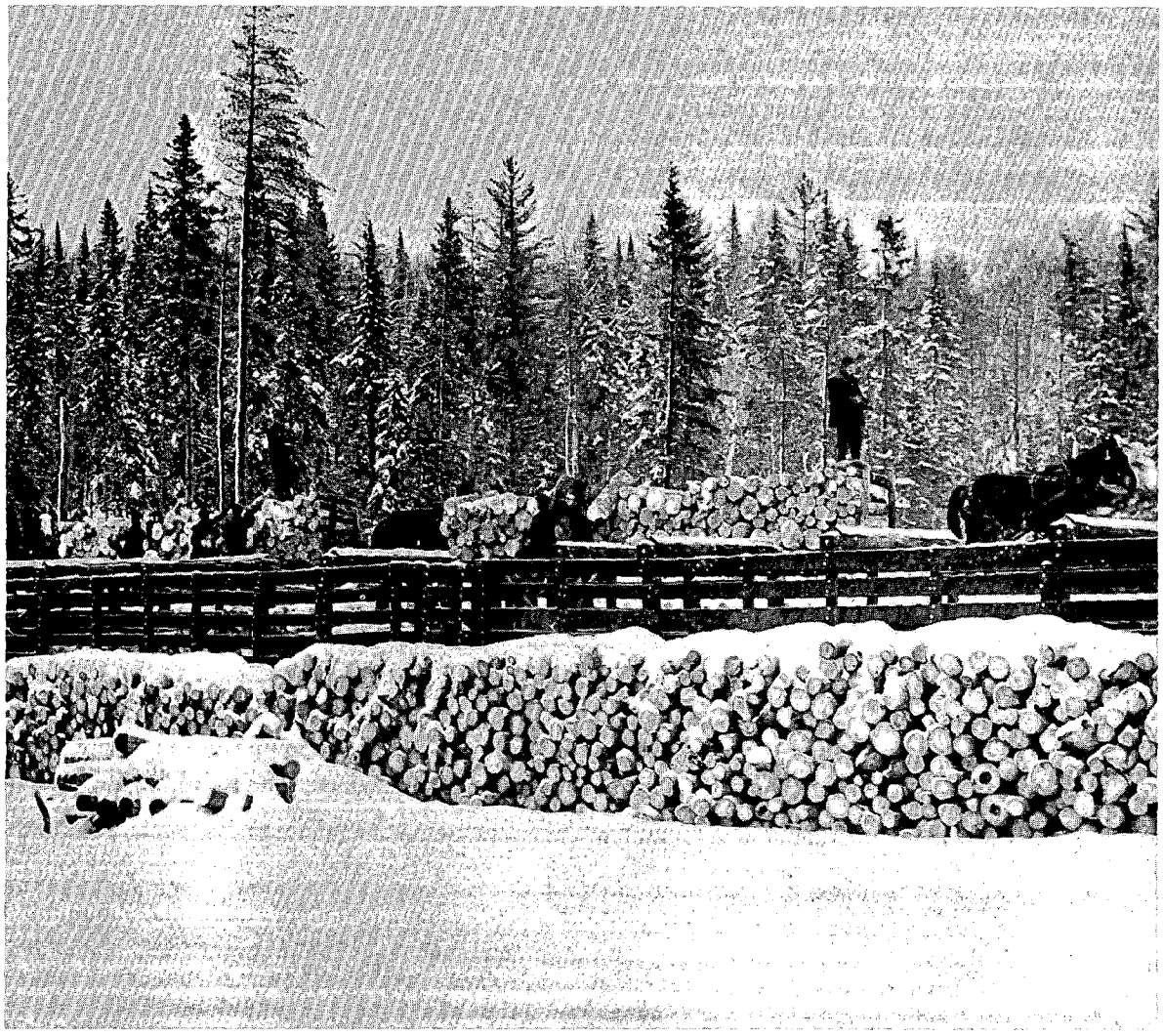
1. M.R.S.A., Title 12, Section 681.
2. M.R.S.A., Title 12, Section 685-B, 1-B.
3. Staff memo dated October 9, 1975.
4. Staff paper on Development, January 1974. p. 21.
5. M.R.S.A., Title 12, Section 685-B,4.
6. From 1970 U.S. Census.
7. "Lessees in the Unorganized Townships of Maine: A Survey of Background Information, Opinions and Attitudes", and "Lease Information, and an Analysis of the Attitudes of Residents Toward Land Use in Maine's Unorganized Areas."
8. Figures are from the Outdoor Recreation Paper prepared for the Land Use Regulation Commission by Thomas J. Cieslinski, Bureau of Parks and Recreation.
9. Based on analysis of aerial photography of the Sugarloaf area.
10. Staff Paper on Transportation, April 1974.
11. The five sites are: Lost Pond (Bingham), Site Leo, Oquossoc, Pleasant Ridge, and Robinson Pond.



6 Objectives and Policies

The Objectives of the Plan

Much of the Land Use Regulation Commission's jurisdiction represents a unique resource to the people of Maine. Indeed, it contains timber management and recreational opportunities that are largely unavailable elsewhere in the Northeastern United States. In order to preserve these and other values, and because the resources are limited, the Commission's statute expressly calls for planning for the proper use of resources and for guiding land use activities to achieve this "proper" use.

To reach this goal the Commission will guide all land use activities to areas where soils, geologic, hydrologic and topographic conditions and other natural conditions are suitable for such uses, and where the intended uses are not in substantial conflict with other objectives.

Thus development activities which can destroy significant wildlife and fisheries habitat threaten areas with special outdoor recreation potential, or substantially reduce the availability of highly productive timber and agricultural land will be regulated.

It will also include the control of development to protect natural resources, preserve values, and promote timber and agricultural practices.

The Commission's objectives will be to protect and enhance:

- the forest resource which dominates the character of the area;
- air and water quality;
- soil resources (including areas with fragile soils and steep slopes, such as mountain areas);
- fish and wildlife habitat (including waterfowl areas and surface waters);
- resources and areas which offer significant outdoor recreational opportunities;
- the natural beauty of shorelands, scenic vistas and scenic areas;
- resources and areas of scientific and historic value (including historic buildings, structures, sites, objects and trails), and
- other resources identified as being rare, unique or endangered,

and to promote:

- timber management in areas which are currently or potentially highly productive;
- agricultural management as a land use, particularly on areas which are currently or potentially highly productive for crops;
- land use activities which promote working and living conditions desired by the people of Maine;
- the cooperation of private landowners in assisting the Commission to achieve the objectives of this Plan.

and to support:

- scientific management of timber resources in order to provide raw ma-

terials for forest industries;
- land taxation which supports resource management and use which is in the long term public interest;
- management of public land for a variety of public uses.

In reaching these objectives the Commission will assure that:

- the statutory provisions of the Land Use Regulation Law are effectively implemented;
- the public costs for services from additional development not exceed the public benefits, and
- there is on-going public participation and public access to information in the Commission's affairs.

Following are policy statements based on the above objectives. The statements establish the basic aims for planning and land use in the jurisdiction. They will be used by the Commission as the basis for regulatory decisions and as guidelines for permit decisions. They are the ground rules for the implementation of this Plan and for all future development activity in the unorganized and deorganized townships.

Major Policy Statements

Based on the charge of the Legislature and its stated objectives, the Commission has established the following major policy statements as a basis for regulatory decisions and as a basis for more specific land use standards and regulations.

The major policy is to:

Protect the natural resources by prohibiting those uses that will cause undue degradation of the resources, and that are not suitable in terms of social, economic, and cultural impact.

To achieve this, the Commission will adopt Permanent Standards and establish and designate District Boundaries reflecting the following policies. The Commission will be guided by the order of the policies as listed below:

1. **Conserve the natural resources for timber production and outdoor recreation.**
2. **Support the management of all the various resources,** based on the principles of sound planning, and consistent with principles of multiple use, to ensure the continual flow of products from forest and agricultural land and the continued availability of the area for timber production, outdoor recreation, and fish and wildlife habitat.
3. **Maintain the natural character of certain large areas to protect natural values and primitive recreation opportunities.** No development other than development associated with the primitive recreational experience, and timber management shall be permitted therein. Such areas shall contain remote ponds, lakes, streams, trails, scenic locations, unusual features, and other natural values that characterize the natural character of the unorganized areas.
4. **Establish suitable patterns of development.** To this end the Commission will:
   a. Encourage new development in suitable existing developed areas,
   b. Promote orderly, balanced growth adjacent to these areas, and
   c. Allow well-planned, self-sufficient development in other areas.

   Development will be permitted within appropriate zoned districts where the capability of the resources is not exceeded.

   Major development will be permitted only where: (1) needed services are available or can be provided without adverse public financial, social, or environmental costs; (2) the productivity of existing agricultural and forest land is not significantly lessened; (3) the opportunity for non-intensive recreation activities is not significantly diminished; and (4) it is consistent with both local and regional values.
5. **Establish reasonable limits to growth** based upon resource capabilities, existing conditions, the availability of public services, access, ownership patterns, tax considerations, and current and projected growth rates.

Natural Resource and Development Policies

The following refinement of the Major Policy Statements was based upon: the study and review of the effectiveness of interim land use controls; the values and capabilities of the resources of the jurisdiction; and existing development and trends. These are reported on Sections 3 through 5.

The following is a distillation of that information. It provides a set of broad policy statements that can be used as a basis for decision-making and the establishment of zoning districts and regulations.

Natural Resource Policies

A. Water Resources

1. Maintain and enhance water quality classifications and adopt a policy of non-degradation to ensure high quality water supplies for the people of the State.
2. Regulate the use of all air, land and water areas that influence water quality (including wetlands, shorelands, flood prone areas, high elevation areas and public drinking supply watersheds) to ensure that water quality is not adversely affected and human and wildlife habitats are not endangered.
3. Regulate dredging, filling, draining, and the alteration of immediate shoreland areas so as to prevent water pollution and the destruction of wildlife habitat, and to minimize change in the water table or water level.
4. Regulate land use activities along the shorelands of all surface waters to ensure their protection. The extent of such regulation will vary depending on water quality and shoreland uses and conditions.
5. Limit development on lakes and ponds in accordance with their capabilities. Consider the following in determining capability: recreational potential, trophic state, distance from public access, and size. Recognize that the higher the biologic quality of these waters, the more susceptible they are to degradation from development, and the greater their value for water oriented recreation.
6. Encourage the relocation of development presently in flood prone areas and susceptible to flood damage, to non-flood prone areas. Prohibit new buildings in flood prone areas.
7. Encourage the cooperative use of docks, access points, and boat launching sites on ponds and lakes. Encourage public access via these points on some bodies of water.

B. Soils, Geology, and Mineral Resources

1. Determine development suitability using soil capability as a major determinant.
2. Investigate solutions to the problems involved in obtaining soils data and soil tests in certain areas of the jurisdiction. Continue to apply the standards of the current Soil Suitability Guide for Land Use Planning in Maine, and to use the State Plumbing Code as a basis for waste disposal regulation and the establishment of minimum single-family residential lot sizes based on soil type.
3. Regulate land uses on identified aquifer recharge areas that can adversely affect the quality of water supplies.
4. Regulate structural development in areas with identified geologic hazards.
5. Establish minimum performance standards for those land uses that are known to cause significant erosion and sedimentation and require that these standards be met. Encourage timber harvesting and agricultural practices that reduce the possibility of soil erosion.
6. Maintain an on-going research program to inventory and evaluate mineral sites in order to ascertain which are most appropriate for development and which are most appropriate for other uses.
7. Discourage non-resource related permanent development on identified mineral resource sites so as to ensure their availability for extraction and use.
8. Allow exploration for mineral deposits within all land use districts, provided that the method of exploration creates minimal disturbances and that such exploration will not be a license to further development.
9. Regulate all mining operations so as to minimize air, water, noise, and visual pollution, assure public safety and avoid adverse impacts on fish, plant and animal life.
10. Establish performance standards for the operation and restoration of gravel pits and other extraction operations.

C. Timber Resources

1. Limit development that will interfere with continued timber and wood fiber production in management subdistricts.
2. Encourage the multiple use of the forest resource for: timber harvesting, outdoor recreation, wildlife habitat, and water quality enhancement.
3. Regulate land uses that are not essential to forest management or timber production on highly productive timberland.
4. Regulate forest management timber harvesting and the construction of land management roads, in protection and development subdistricts to the extent necessary to conserve the resource for which the districts were established.

D. Agricultural Resources

1. Limit non-farm related land uses in prime farmland areas. Support other proposals to maintain active farms.
2. Regulate agricultural practices in protection subdistricts where those activities can cause accelerated erosion, sedimentation, pollution, siltation, or contamination.

E. Recreational Resources

1. Recognize that many of the natural areas of the jurisdiction, including surface waters, shorelands, mountains and forests provide special

recreational opportunities. Conserve these resources.
2. Regulate development in remote and/or undeveloped recreational areas to ensure the conservation of natural values for uses such as canoe routes, hiking trails, and remote ponds.
3. Encourage the diversified, non-intensive use of most recreational resources.
4. Provide opportunity for well-planned recreational developments for which demand and viability can be adequately demonstrated.
5. Encourage cooperative use agreements between private recreational organizations and landowners.

F. Wildlife and Fisheries

1. Recognize the aesthetic, ecological, recreational, scientific, historical and economic value of the conservation of wildlife and fisheries resources to the State.
2. Protect areas and ecosystems demonstrated to be necessary to maintain and enhance species of fish and wildlife. Regulate land use activities in those habitats judged to be essential to the species.
3. Encourage the management of resources to perpetuate all species and their habitats. Recognize and support the traditional management practice of cooperative landowner agreements designed to protect wildlife habitat.
4. Regulate land uses to protect fish spawning and nursery areas. Where necessary, limit motorized access to such areas.
5. Regulate pesticides, emulsifiers and other chemical agents that may have a detrimental effect on fisheries and wildlife.

G. Scientific Resources

1. Protect areas containing unique, rare, or critical landforms, water resources, vegetation, animals or archaeology so as to preserve their scientific, ecological, and educational values.
2. Regulate land use activities to ensure the protection of unique, rare, or critical scientific resources.

H. Air

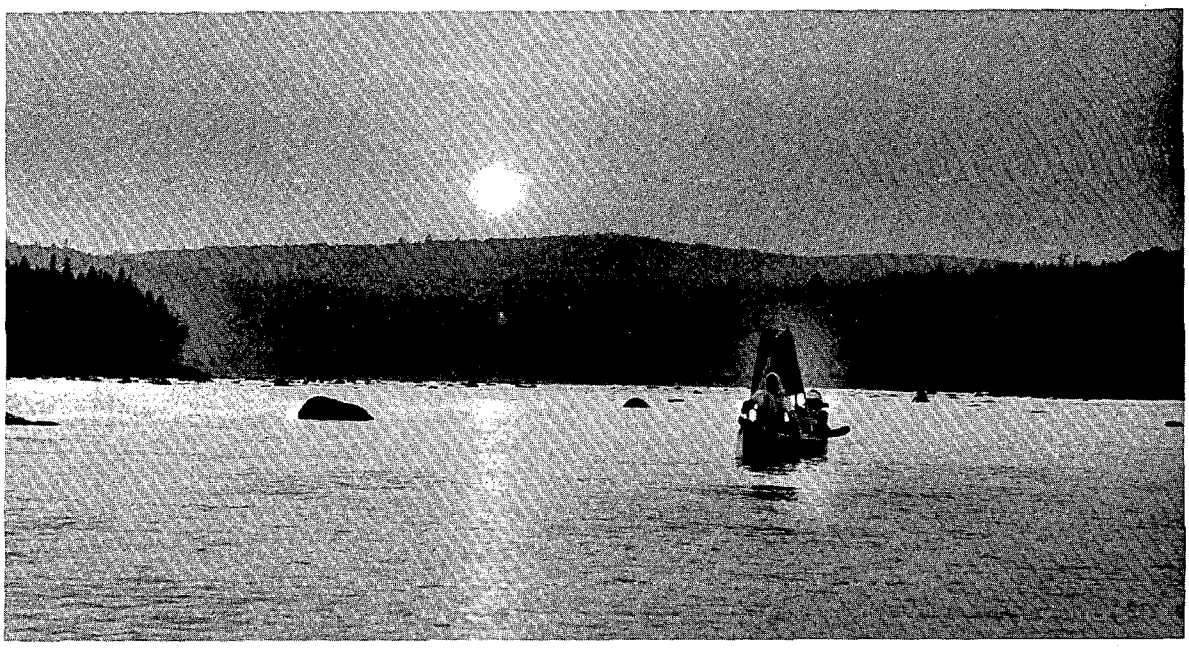
1. Require compliance with all state and federal air quality standards.

Development Policies

While it is the Commission's desire to protect natural resources and to support timber and agricultural management and outdoor recreation opportunities, new residential, commercial, recreational and industrial development is important to the area's social and economic well being. To plan for this development and guide it to those areas best suited for its location, the Commission will base its decisions on the following policies:

A. Guiding Development

1. Formulate zoning policies and standards to encourage new development in those existing developed areas which are appropriate in terms of sound planning and naturally capable of supporting such development.
2. Promote orderly, balanced growth adjacent to existing developed areas, particularly in areas adjacent to organized towns or patterns of settlement where the development is compatible and appropriate in terms of sound planning and the natural capabilities of the site.
3. Encourage new industry and commerce in appropriate areas proximate to existing patterns of settlement and development where such industry will provide significant employment opportunities for the people of Maine.
4. Allow opportunity for secluded single unit residential structures set apart from existing patterns of development. Mandate low densities for such structures to maintain the character of the area and ensure that such development not impinge on highly productive timber and agricultural sites, or identified natural areas.
5. Limit the total amount of all residential and recreational development permitted on Great Ponds in accordance with such factors as: the availability of access, trophic state, recreational capacity, size and existing development and soil conditions.
6. Permit development only within appropriately zoned subdistricts and where the capabilities of the resources are not exceeded. Limit residential densities in areas zoned for development on the basis of the Soil Suitability Guide, the recommended lot size in the State Plumbing Code and other statutory criteria. Establish incentives to encourage innovative and creative site planning within these areas.
   Criteria for determining the suitability of an area for designation as a development zone or for major new structural development, will include: proximity to access routes, adjacent patterns of land use, the extent of the applicant's ownership, the availability and costs of public services (if any), the impact of additional traffic, the local and regional fiscal implications, the environmental impact, the extent of multiple use, and the quality and nature of the proposed development.
7. Allow well-planned, self-sufficient, development in other areas. Such development may be permitted as a planned development, subject to site plan review, if: (1) there is a demonstrated economic and social benefit to the State of Maine and its people; (2) the productivity of

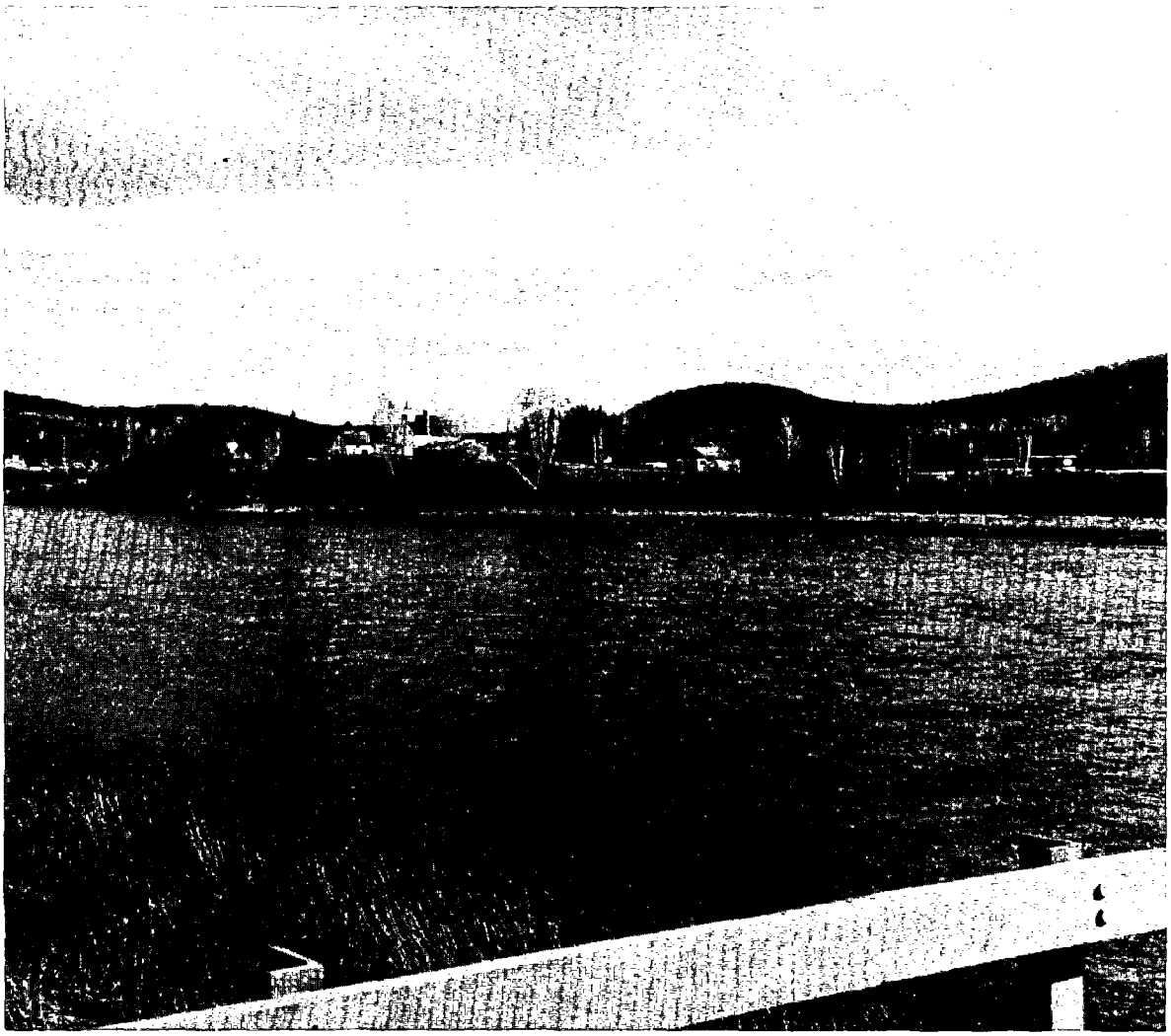


existing forest and agricultural land is not significantly lessened; (3) the opportunity for outdoor recreation activities is not significantly diminished; (4) needed services are available or can be provided to support it without financial and social costs to the community or unreasonable environmental costs, (5) the proposal relies on a particular natural feature or location for its success; and (6) it is consistent with both local and regional values.

8. Restrict new major public roads and related development of the jurisdiction to prevent loss of the traditional quality and character of woodland areas.
9. Allow major utility facilities only where their need to the people of Maine has been demonstrated, the structures are sited and landscaped to minimize intrustion and the construction designed not to unduly intrude upon surrounding natural resources.

B. Development Quality

1. Require that provision be made for fitting all structural development harmoniously into the existing natural environment.
2. Encourage building developments that utilize the grouping of buildings to provide common space and a village-like character. Discourage random unplanned developments along rural highways that disrupt traffic flow and, in certain areas, destroy scenic values.
3. Permit a mix of different land uses within the same development subdistrict provided that they are supportive of each other and do not give rise to conflicts or cause public nuisance. Require incompatible uses to be located separately.
4. Require that one basis for the review of "planned development" proposals outside designated development subdistricts, and proposed for management or protection subdistricts, be the quality of the site planning and building lay out.
5. Require the use of buffers and/or landscaping to conceal conflicting uses from each other and to improve the scenic quality of shorelines and roadways.
6. Require that all recreational, commercial, and industrial developments provide for adequate loading, parking, and circulation. Limit the number and size of outdoor signs.
7. Require that new utility lines, pipe lines, and public transportation right-of-ways and their associated facilities be located away from scenic areas or be landscaped so that they do not degrade a scenic area.
8. Deny development proposals that would exceed known water supply capabilities.
9. Regulate the disposal of all sewage, solid waste, manure, and septic sludge and prohibit their disposal in flood prone areas, or on excessively wet or permeable soils.
10. Encourage development that is energy efficient and that incorporates the best practical technology to conserve energy, and prevent air and water pollution.



7 Recommendations and Implementation

Recommended Land Use Subdistricts

The Commission's experience with Interim Land Use Districts during the past years has shown that they are basically a sound zoning tool for protecting important resources and guiding development. The districts described in this section are based on the Interim Districts. They have been revised, however, to resolve identified problems and to guide growth more effectively.

The major district classifications, as mandated by section 685-A of the Statute are: Protection, Management, and Development. The recommended new districts keep these classifications and delineate new sub-classifications to reflect experience.

In defining and mapping areas, resources needing protection will be of primary concern; these subdistricts will be defined first and will not be reduced by the delineation of management and development districts. Where subdistricts overlap, the more restrictive standards will apply.

The recommendations for new subdistricts do not spell out the specific standards or regulations. Instead, they provide concepts intended to guide the delineation of subdistricts and structure growth. When viewed with the findings of Section 4., (Natural Resources) and Section 5, (Development), and with the experience gained over the last few years, they provide a base for the establishment of permanent and specific land use standards.

Once the recommended subdistricts are adopted, they must by law be reviewed every five years. At these times revisions suggested by new data, insights, and resource information will be reviewed at public hearings.

In addition, any landowner or lessee may, at any time, petition the Commission to rezone a parcel of land. The general criteria for rezoning are in the Statute where it states, in part, that no area may be rezoned unless there is substantial evidence that: "The change would be consistent with the standards for the district boundaries in effect at the time; the Comprehensive Land Use Plan...", the intent of the Statute, and changed conditions. This Plan and the regulations and standards adopted to implement it will provide more detailed criteria for redistricting. Thus, the districting is not unchangeable; it will be modified when circumstances warrant it.

Variance and appeal procedures are also in the Statute. A variance is granted when it can be proven that strict compliance would cause "unusual hardship or extraordinary difficulties because of exceptional or unique conditions of topography, access, location, shape, size or other physical features of the site, that the proposed development is in keeping with the general spirit and intent of..." the Statute and the public interest is otherwise protected.

Any person aggrieved by a Commission decision may appeal to the courts.

Protection Subdistricts

The Statute requires that protection subdistricts be established "Where development would jeopardize significant natural, recreational, and historic resources, including, but not limited to, flood plains, precipitous slopes, wildlife habitat and other areas critical to the ecology of the region or State."

The recommended Protection Subdistricts do not necessarily prevent new development. They delineate where a degree of protection is required and indicate how development will be regulated to achieve the protection required to conserve the resource.

Eleven protection subdistricts designed to meet the objectives of the Statute are recommended. Some subdistricts which define areas where development can cause severe consequences are fairly restrictive as to what land uses can be permitted. Others, like the Shoreland and Great Ponds subdistricts, allow a broader range of development activities because their proximity to flowing and standing waters is not likely to be as disruptive to an ecosystem.

In all protection subdistricts, permits of compliance with minimum standards will be required for all development including: insect and disease control, timber harvesting and land management roads, crossings and gravel or borrow operations.

Finally, this Plan recommends a **Resource Plan Subdistrict** that will be designated and mapped after a management plan is submitted by the owner and approved by the Commission. Such a plan must meet or better the intent of the existing Protection subdistricts, and other adjacent districts and provide for the more efficient management of the area.

Classification:

Wetland Protection Subdistrict (P-WL)

Purpose: The purpose of this subdistrict is to preserve wetlands and their immediate shorelines because of the essential biologic, hydrologic and environmental functions they perform. Preserving wetlands will promote the public health and the safety of persons and property against the hazards of flooding and drought by retaining water during dry periods and holding it back during floods. Wetlands maintain water quality for drinking and recreational purposes by trapping and storing nutrients from upland runoff and serving as a settling basin for silt from upland erosion. Wetlands stabilize water supply by maintaining the groundwater table and groundwater recharge and discharge areas. They also maintain essential plant, fish and wildlife habitat.

It shall be Commission policy to place inland and coastal wetlands in protection subdistricts

Description: This subdistrict will include all coastal and inland wetlands, whether natural or man-made, identified by the Commission on the basis of soils, vegetation or other appropriate criteria.

Standards: Prohibit sanitary landfill, mineral extraction, and the construction of all residential, commercial, and industrial structures in wet-

lands. Provide standards to limit forestry and agricultural operations to ensure that the wetland ecosystem is not endangered. Permit the construction of transportation and utility structures only upon finding that no alternative route is reasonably available; such structures and any other operation involving filling, draining or dredging may only be permitted as a conditional use. The effect of these uses on the wetland ecosystem will be of prime concern in considering a conditional use permit.

Classification:

Flood Prone Protection Subdistrict (P-FP)

Purpose: The purpose of the flood prone subdistricts is to protect those areas where flooding may constitute a danger. Development is to be regulated to prohibit certain activities therein in order to promote the public health, safety and general welfare. The protection afforded by this district will minimize the human and financial costs of flood control and flood cleanup programs; and minimize danger from malfunctioning water supply and waste disposal systems in flood prone areas.

Description: This subdistrict will cover areas that are known to have a history of flooding and those areas where serious flooding can be reasonably predicted. It will extend along portions of both sides of most rivers and streams in the unorganized areas.

Standards: No buildings shall be constructed in flood prone areas and no floatable or flammable substances or pesticides and other harmful (toxic) substances shall be stored there. Other structures and development activities will be regulated to assure that they do not restrict, divert or speed the flow of flood waters. Timber harvesting will be allowed, provided no material is deposited in the streams or stacked so it could become a hazard in a flood.

Classification:

Soil and Geology Protection Subdistrict (P-SG)

Purpose: The purpose of this subdistrict is to protect areas that have precipitous slopes or unstable characteristics from development that can cause excessive accelerated erosion, mass movement, or structural damage, all of which could cause public danger or threaten public health.

It shall be the Commission's policy to designate such areas for protection, to prevent certain construction, and to regulate other development.

Description: This subdistrict will include all those sizeable areas in the jurisdiction that could be subject to accelerated erosion, mass movement, or geologic hazard due to slope conditions, lack of vegetative cover, soil type or underlying geology.

Standards: Prevent commercial, industrial and residential buildings on steep slopes within this district and regulate other development, such as management roads, that could cause excessive accelerated erosion or be adversely affected by soil or geologic conditions. Require that extensive precautions be taken especially during construction.

Classification:

Recreation Protection Subdistrict (P-RR)

Purpose: The purpose of this subdistrict is to provide a degree of protection, from development and some recreational uses, to those areas that support significant primitive recreation activities. By so doing, the natural environment that is so essential a part of the recreational experience will be conserved.

Description: This subdistrict includes, but is not limited to, trail systems, remote ponds, canoe streams, and other bodies of water that are removed from major access routes and are currently not developed

for other than primitive recreational activities. The subdistrict shall include the resource and a buffer area large enough to protect it from the intrusion of development and to assure the natural character of its surroundings is retained.

Standards: No structural development other than that essential to the enjoyment of a particular primitive recreation activity or activities (such as tent sites for camping), will be permitted in this district. Timber harvesting and gravel extraction essential to land management and road maintenance will be permitted provided these activities at least conform to minimum standards designed to ensure the continuity of the recreational potential.

Classification:

Mountain Area Protection Subdistrict (P-MA)

Purpose: The purpose of this district is to conserve the natural equilibrium of vegetation, wildlife habitat, geology, slope and soil in mountain areas. Such conservation will: reduce danger to public health and safety posed by unstable mountain areas; protect a source of large quantities of high quality water; and/or conserve the views of mountain areas for their scenic values. It shall be Commission policy to designate such areas for protection.

Description: This district shall include all those mountain areas judged to have marked climatic extremes, steep slopes, fragile soils (or exposed rock), rare animal species, high mountain plant life, rapid drainage and/or exceptional scenic value.

Standards: Only those land use activities and structures essential to primitive recreation, forest management, timber harvesting and land management roads, shall be permitted upon review. Such uses shall be regulated to preserve watershed and scenic values and prevent or minimize accelerated erosion. Structures related to alpine skiing and radar, microwave and like uses will be viewed as conditional uses.

Classification:

Fish & Wildlife Protection Subdistrict (P-FW)

Purpose: The purpose of this subdistrict is to conserve important fish and wildlife habitats. Habitats essential to the citizens of Maine for the maintenance of fish and wildlife populations because of their economic, recreational, aesthetic, educational and scientific value shall, therefore, be designated as P-FW Subdistricts.

Description: This subdistrict shall include all important wildlife and fishery habitats including, but not limited to: deer wintering areas, coastal nesting islands, heron rookeries, significant fish spawning, nursery and feeding areas, and critical habitats of State or Federally listed endangered and threatened fish and wildlife species. All such habitats shall be designated P-FW Subdistricts when it is shown that they are essential to the management of the species and when, in the case of deer wintering areas, the provisions of Section 685 A.6. of the Statute have been met.

Standards: Land uses that have a significant detrimental effect on species, populations or habitat essential to their management will be regulated. Timber harvesting, agriculture, land management road construction, and utility rights-of-way will be permitted, after review, if minimum standards are met and the purposes of this subdistrict are upheld.

Classification:

Unusual Area Protection Subdistrict (P-UA)

Purpose: The purpose of this subdistrict is to protect historic, educational, scientific, archaeological, scenic and other resources identified as being susceptible to undue degradation and that cannot be protected by other subdistricts. Other

resources would include the direct watersheds of those lakes or ponds especially susceptible to degradation by man's activities.

Description: This subdistrict shall include all those areas of significant value in conserving structures, sites, objects, phenomena, or natural systems of special historic, scenic, aesthetic, educational, archaeological, architectural, natural, or scientific value to the region or the State. Federal and state lands and parks that do not have an approved master plan will be placed in this subdistrict.

Standards: Only those uses that would compromise the purposes for which this subdistrict was established would be prohibited. Other uses would be regulated to conform with standards formulated to protect the special values of each area. The standards will ensure that new uses are compatible with the nature and/or architectural styles of the subdistrict.

Classification:

Aquifer Protection Subdistrict (P-AR)

Purpose: The purpose of this subdistrict is to protect those water-bearing stratum of rock, gravel or sand that are currently or potentially a source of public or private well water, by regulating those land uses that could cause wastes to infiltrate the water supply.

It shall be Commission policy to identify such areas and designate them for protection.

Description: Aquifer and aquifer recharge areas in this subdistrict will include only those identified as being important for water supply to present and future development that can be reasonably foreseen.

Standards: Those land uses detrimental to water quality or the capability of the land to absorb water are to be regulated. Standards relating to the extent of impervious ground cover, septic tanks, sewers and the disposal of other wastes shall govern development in this subdistrict. Timber management activities and agriculture will be allowed in this subdistrict provided they at least meet minimal standards.

Classification:

Shoreland Protection Subdistrict (P-SL)

Purpose: The purpose of this subdistrict is to regulate activities occurring along the shores of rivers, streams, ponds (other than Great Ponds), coastal and inland wetlands, and coastal waters to ensure their protection from pollution, erosion, waste deposits and scenic degradation.

Description: All shorelands of rivers, streams, ponds under 10 acres, wetlands, and coastal waters not designated for protection because of flooding, slopes, recreation or other reasons shall be designated P-SL. Most rivers and streams, small ponds, wetlands, and coastal shores will fall into this subdistrict.

Standards: The type and density of land use permitted in this subdistrict will depend on the subdistrict flanking it on its long, upland side.

In all situations single-family residential units, home occupations, and minor structures for scientific, educational or nature observation purposes will be permitted, provided the applicant can prove suitable soil and other favorable site conditions exist and a permit can be obtained. Small scale resource-based commercial developments will be considered by the Commission as conditional uses.

Where the P-SL Subdistrict flanks other Protection Subdistricts or a General or Highly Productive Management Subdistrict only the above uses will be considered for approval. In the Management Natural Character Subdistrict however, only remote camps will be permitted.

Where this subdistrict flanks a Development Subdistrict, the same uses permitted in the latter will be permitted.

In all of the above situations, however, setbacks will be required and minimum lot frontage and timber harvesting standards will be set; such standards will reflect the character of the flanking subdistrict. Deviation from the required setback will be made for those structures that, by their nature, are required to be located near water, such as lobster pounds, boat-houses, etc.

- Non-residential uses within the subdistrict will be regulated to ensure no pollutants enter the water.
- Forestry and agricultural practices, land management roads, and small non-commercial gravel operations will require a permit if minimum standards are not met.
- Cutting, filling and dredging and any alteration of the shoreline in shoreland areas will be regulated.

Classification:

Great Pond Protection Subdistrict (P-GP)

Purpose: The sensitive nature of the shorelands of lakes and ponds requires that they be regulated more strictly than other areas that are more tolerant of man's activities.

The purpose of the Great Pond Subdistrict is not to preclude residential and recreational development on Great Ponds but to regulate these areas so that development will not degrade the waters, recreation potential, fishery habitat, or scenic character.

This subdistrict will not apply to bodies of water included in the P-RR Subdistrict.

Description: All shorelands of Great Ponds which are not zoned as other protection subdistricts shall be Great Pond subdistricts (P-GP).

Designation as P-GP shall not preclude development, however, a development capacity for each lake and pond will be determined. Such factors as water quality, assimilative capacity, recreation potential, proximity to developed areas, shoreland characteristics, surface area and total shoreline will be considered in making this determination.

Where a P-GP Subdistrict is surrounded by a Management Natural Character Subdistrict no buildings other than remote camps will be allowed.

The P-GP Subdistrict shall extend island from the normal high-water mark for a distance sufficient to ensure the regulation of those activities that affect the water body.

Standards: All those factors considered when evaluating development in the D-GN Subdistrict shall apply to this subdistrict. Commercial development and campgrounds will be conditional uses, allowed provided they are compatible with residential uses, that the applicant can prove suitable soil and other favorable site conditions exist and that a permit is obtained.

Where this subdistrict is contiguous to a development subdistrict, the same uses allowed therein may be permitted as conditional uses.

Setbacks will be required and minimum lot frontage and timber harvesting standards will be established. Deviation from the required setback will be made for those structures that, by their nature, are required to be located near the water.

Uses such as forest and agricultural management activities will be subject to at least minimum standards, which if proposed to be exceeded will necessitate application for a permit.

Other uses such as the following will require review and approval:

- water impoundments
- permanent wharfs, docks and piers
- filling, draining, and dredging

No building development will be permitted beyond the develop-

ment capacity established for the lake or pond.

Classification:

Resource Plan Protection Subdistrict (P-RP)

Purpose: The purpose of this subdistrict is to provide for the more efficient or more effective management of single or multiple protection subdistricts (and in some cases adjoining management subdistricts) than can be realized through the use of protection subdistricts and their related standards. Management plans for such areas may be submitted to the Commission for review, and upon approval, such areas shall be designated as Resource Plan Subdistricts.

Description: This subdistrict shall be designated by the Commission after an acceptable management plan has been approved. It may include areas held or managed by a state or federal agency, or privately owned, and held primarily for the conservation, protection, or enhancement of significant resources of natural, aesthetic, recreational, historic, archaeological, scientific or scenic value to the region or the state.

Standards: The standards applicable to this subdistrict shall be those adopted by the Commission in accordance with each approved management plan. Such standards shall not be less restrictive than those of the subdistricts they replace. The plan shall be authorized by that person (or those persons) or agency holding legal title to such land. A legally binding conservation easement may be accepted as a management plan.

Management Subdistricts

In general, management areas are: "Areas which are appropriate for commercial forest product or agricultural uses and for which plans for additional development are not presently formulated nor additional development anticipated."

There are three management subdistricts. In general the present Interim regulations would apply in the new M-GN (Management-General) Subdistrict. Designation of an area as a M-HP (Management-Highly Productive) Subdistrict

would reserve it primarily for forest or agricultural management and prohibit most uses, other than those essential to management functions.

The new M-NC (Management-Natural Character) Subdistrict is recommended to protect the special character of certain extensive, relatively undeveloped "wild" areas by prohibiting development not directly related to forest or agricultural management or primitive recreation.

All land uses in management subdistricts will be subject to the Statute, which states: "Land Use Standards...shall in no way limit the right, method, or manner of cutting or removing timber or crops, the construction and maintenance of hauling roads, the operation of machinery or the erection of buildings and other structures used primarily for agricultural or commercial forest product purposes, including tree farms..."

No commercial mineral extraction will be permitted in a management subdistrict. Small land management gravel and borrow operations will be allowed without review whereas pits of larger size will be required to obtain a permit.

Classification:

Highly Productive Management Subdistrict (M-HP)

Purpose: The purpose of this subdistrict is to ensure the continued availability of products from forest and/or agricultural lands by reserving areas for these uses.

Description: Highly Productive Management Subdistricts are areas identified as prime or unique for the production of forest or agricultural products, which are not otherwise included in Protection Subdistricts. They may include forest land and/or considerable agricultural land currently under commercial management. They may also include other undeveloped areas identified as being highly productive but not currently managed for these purposes.

Standards: Areas identified as prime or unique shall be designated as Highly Productive. Structures required for the management of these lands will be permitted without review. Buildings necessary for the comfortable residence of the owners thereof, essential utility services, and public roads will be permitted once a permit is obtained. The standards applicable to gravel extraction in the M-GN Subdistrict will apply in this subdistrict.

The burden of proof for rezoning an M-HP Subdistrict to any development subdistrict shall be upon the applicant who shall demonstrate, by a preponderance of the evidence, that no reasonable return may be realized from management uses.

Classification:

General Management Subdistrict (M-GN)

Purpose: The primary purpose of the General Management Subdistrict is to permit forestry and agricultural practices to occur with minimal interference from unrelated development. A secondary purpose is to permit individuals to reside apart from developed areas in relative seclusion.

Description: The majority of the lands of the unorganized areas will fall into General Management Subdistricts. These are areas which are appropriate for commercial forest production or agricultural uses and that do not require special protection.

Standards: All forest and agriculture management activities will be permitted without review and approval by the Commission. Single family residences and home occupations on large lots and small, non-commercial structures utilized for camping, or educational, scientific, or nature observation purposes, will be allowed once a permit is obtained. Small commercial camps necessarily dependent on the natural resources of the subdistrict may be permitted by the Commission as conditional uses.

Small seasonal sawmills will be permitted once a permit is obtained. Other commercial and industrial uses including wood processing and agricultural processing plants are not to be permitted.

Small, non-commercial gravel or borrow pits will be allowed in

these subdistricts without review. Large pits will require a permit.

The conditions that apply to residential and other building development in the General Development Subdistrict shall apply to development in this subdistrict except that the following shall also apply:

- No subdivision will be permitted
- A larger minimum lot size than that recommended by the State Plumbing Code shall be required
- A minimum lot frontage will be set
- A generous setback from any public road will be required

Any such new development in a Management Subdistrict will not be recognized as grounds for rezoning to a General Development Subdistrict.

Classification:

Natural Character Management Subdistrict (M-NC)

Purpose: The purpose of the Natural Character Management Subdistrict is to maintain some of the areas that characterize the natural outdoor flavor and spirit of certain large undeveloped areas of the jurisdiction and to permit only forestry and agricultural practices and primitive recreation. Unrelated development that might interfere with these activities and natural values will not be permitted.

Description: The subdistrict will encompass areas identified by the Commission as being significant because of: their natural and wild character; remoteness; lack of development; incidence of special recreation resources; and opportunities for primitive recreation, such as hunting, fishing, canoeing, hiking, and camping. The subdistrict may include different protection and/or existing developed areas within its boundaries. It shall be large enough to ensure the conservation of the above mentioned values and may contain groups of remote ponds, mountains, valleys, wetland, lakes, and other natural features.

Standards: Forestry and agricultural practices, which are by Statute exempted from regulation will be permitted except that in Protection Subdistricts within the M-NC Subdistrict they shall be regulated by the Protection standards or the standards of this subdistrict, whichever are stricter. Primitive recreation activities will be permitted without Commission review. No other development will be allowed except that essential to the support of primitive recreation activities such as trail-side camp sites and remote camps that are associated with traditional seasonal uses and require no public services.

Development Subdistricts within the M-NC Subdistrict shall not be expanded into it, nor shall Planned Development be permitted.

Development Subdistricts

Generally, Development Subdistricts shall, by law, be: "Areas discernible as having patterns of intensive residential, recreational, commercial or industrial use, or commercial removal of minerals or other natural resources, and areas appropriate for designation as development districts when measured against the purpose, intent and provisions of..." the Statute and this Plan.

Four Development Subdistricts are recommended to replace the single Interim Development district now in effect. These provide for:

- **General Development (D-GN)**
  Residential and compatible commercial uses in areas other than on the shores of lakes and ponds, streams, wetlands and coastal areas.
- **Residential Development (D-RS)**
  Residential uses in areas other than on the shores of lakes and ponds, streams, wetlands and coastal areas.
- **Commercial and Industrial (D-CI)**
  Uses incompatible with residential development.
- **Planned Development (D-PD)**
  Using a site plan review procedure this subdistrict allows for projects, located

distant from existing development, that rely on a particular natural feature (or location) for their success.

The extent of the boundaries of the first three development subdistricts will be established by the Commission after the following have been taken into consideration: sound planning principles, resource capability, patterns of existing development and ownership, development trends, and the availability of inventory data. Most boundaries will encompass existing developed areas and those adjacent areas where enough information is available to make a decision based on the above factors. Public roads and utility lines will not be considered as Development Subdistricts, however, where such new construction adjoins or passes through a Development or Protection Subdistrict, a permit will be required.

"Adjacent areas" shall mean areas or land parcels within the vicinity of existing patterns of building development. In determining adjacency, the Commission shall endeavor to create homogeneous development areas where the benefits of shared community services can be enjoyed. Spread out, linear patterns of development will be avoided and discouraged. Adjacency to nonstructural development, such as a commercial gravel pit shall not, however, by itself be sufficient reason for the extension of that subdistrict for unrelated commercial and industrial uses.

Particularly significant to the Development Subdistricts are the provisions of Section 685 B.4 of the Statute. That section establishes criteria for approval of all development applications to the Commission. Thus, designation of an area as a Development Subdistrict does not automatically give a landowner license to proceed. Most land development activities require a site specific permit.

Furthermore, the Planned Development Subdistrict differs from the other three subdistricts in that it is mapped after an acceptable site plan application is made to the Commission by a landowner. The aim is to provide for unpredictable development proposals, planned for areas distant from existing development, that rely on a particular natural feature or location for their success.

Because of the above and the site plan review procedures by which Planned Development proposals will be evaluated, public hearings will be held and explicit information about each such development application will be required.

The intent of this procedure is to ensure quality development, design flexibility and a unified approach to planning in the jurisdiction where the integrity of the natural environment must be considered and minimally affected by new development.

Classification:

General Development Subdistrict (D-GN)

Purpose: The General Development Subdistrict will recognize existing patterns of development in appropriate areas and encourage patterns of compatible development therein. It is the Commission's intent to promote development within and adjacent to existing developed areas rather than in separated locations. These areas shall be the future growth centers of the unorganized areas because new construction therein will fit with existing development and will, in some cases, be able to share facilities and lessen the cost of community services (such as police protection and snow removal). The intention is to encourage the general concentration of new development, and thereby avoid the fiscal and visual costs of sprawl and provide a continuing sense of community.

Description: The D-GN Subdistrict will encompass patterns of existing development which are primarily residential and/or recreational in character and that are not in a Shoreland or Great Pond Protection Subdistrict. Incompatible non-residential development will be separately zoned or treated as a nonconforming use.

The original zoning of D-GN Subdistricts will include appropriate existing developed areas and adjacent areas where sufficient information is available concerning their suitability for development. It is the Commission's intention to continue to rezone such adjacent areas for development as the resource data is made available either by its own staff or by the landowner. Such zoning shall be dependent upon: a showing of the need for expansion of the existing D-GN Subdistrict; the soil suitability; and the availability of water supply and other services. The Commission will also consider the consistency of the proposal with existing local and regional plans and with the

principles of sound planning.

Standards: Uses permitted in this subdistrict, after review and approval, shall include single and multi-family residential units, subdivisions, and other uses wholly compatible with these activities such as schools, churches, and neighborhood stores. Automobile-related uses, large stores, commercial recreational, entertainment or eating establishments, light industrial uses and other commercial uses that may not be compatible with residential uses will be treated as conditional uses.

The following factors will be considered by the Commission when reviewing development applications:

- state air and water pollution standards
- solid waste disposal
- water supply
- on-site provision for parking, loading and circulation
- safe access and egress to and from roads
- harmonious fit with the environment
- State Plumbing Code requirements
- The Code's recommended minimum single family lot size
- conformance with the Maine "Soil Suitability Guide"
- erosion control and storm water drainage
- landscaping and buffering
- sign control
- noise

Classification:

Residential Development Subdistrict (D-RS)

Purpose: The purpose of this subdistrict is to designate certain areas for single-family residential uses only, so as to provide for residential development that is separated from commercial development. As in the D-GN Subdistrict; the intention is to encourage the general concentration of development in and adjacent to the developed areas.

Description: The D-RS Subdistrict will include existing single-family residential areas that are inappropriate as locations for commercial uses. It is the Commission's intent to encourage similar development in this subdistrict and in suitable adjacent areas. However, where single-family residential uses occur on the shores of Great Ponds the standards for that subdistrict shall apply and where single-family residential uses occur in a Shoreland Subdistrict the standards for that subdistrict shall apply.

Standards: Uses permitted in this district, after a permit is given, shall include all single-family residential uses and those uses commonly associated with residential neighborhoods, such as: churches, day nurseries, schools and cemeteries. Customary home occupations will also be permitted provided they conform with standards. Those factors that are considered when reviewing development applications in the D-GN Subdistrict shall apply in this subdistrict.

Classification:

Commercial and Industrial Development Subdistrict (D-CI)

Purpose: The Commercial Industrial Development Subdistrict will encompass areas of development which are not compatible with residential uses. Such designation will ensure adjacent land values are not comprised or community standards lowered. The D-CI Subdistrict will provide for the continued functioning of important existing commercial and industrial facilities in areas physically separated from other development. It will contain such uses as: industry, commerce, mineral extraction, and waste disposal, that are not best located near residential or outdoor recreational uses. Excessive noise, odor, unsightliness, heavy truck traffic and like conditions will warrant locating a use in this subdistrict. New development with similar characteristics will

be allowed in, and adjacent to such subdistricts where it is appropriate.

Description: This subdistrict shall contain all those existing developments, on suitable sites, that are incompatible with residential development and other uses in the D-GN and D-RS Subdistricts. Additional commercial and industrial development will be encouraged within these areas. Areas adjacent to this subdistrict will be zoned for further development as the Commission determines that a need for such expansion exists and that the basic resources are suitable. Most D-CI Subdistricts will be located near to existing development centers, yet others like those related to mineral extraction, power generation, and rail transportation may be more isolated. The existence of this subdistrict shall in no way limit the construction of structures relating to timber and agricultural management; the subdistrict would, however, include primary wood processing units such as lumber and pulp mills.

Existing commercial and industrial uses on unsuitable sites will be designated as non-conforming.

Large existing commercial gravel and borrow pits shall be included in this district. Proposed commercial gravel and borrow pits will be required to be rezoned as D-CI Subdistricts.

Standards: No Commercial and Industrial Development Subdistrict shall include an area designated as a Protection Subdistrict unless the particular use cannot reasonably function without utilizing part of such a subdistrict. Where this is the case, the best practical technology shall be required to protect the resource.

In addition to the regulatory conditions that apply in the General Development Subdistrict, the following factors will be considered in reviewing D-CI proposals:

- noise and air and water pollution
- plans for the reclamation and restoration of non-productive extracting and mining operations
- the impact of solid waste disposal operations.

Classification:

Planned Development Subdistrict (D-PD)

Purpose: The purpose of the Planned Development Subdistrict is to allow for large scale, well planned development proposals that rely on a particular natural feature or location for their success. The Commission's intent is to permit development apart from existing settlement areas, provided that it can be shown to be of high quality and not detrimental to other values established in this Plan. A permit will be granted only after a public hearing when the Commission is persuaded by a preponderance of the evidence that the location of the site is the best available for the proposed use. Where a D-PD Subdistrict is granted, it shall not provide the basis for subsequent rezoning of the Planned Development to another Development Subdistrict, nor shall it serve to satisfy adjacency requirements for surrounding development.

Description: The Planned Development Subdistrict will accommodate development proposals under single ownership development. In most cases Planned Development proposals will occur in areas zoned as Management Subdistricts. This subdistrict will be approved by the Commission only when the applicant can show that the project is dependent on a particular location for its success and that it can provide its own additional public services. In all cases, the applicant must show that the project is largely self-contained and self-sustaining. The D-PD may encompass such uses as a four-season resort, ski resorts,

hydro-related development, a mine with support facilities, or company town or village.

Standards: All Planned Developments shall be required to meet the applicable regulatory requirements associated with the General Development and/or Commercial Industrial Development Subdistricts. In addition all applicants shall show that:

- The proposal is basically self-sustaining in terms of services like sewage disposal, water supply, road maintenance, policing and fire control.
- The project is based on professional engineering and site planning.
- The plan incorporates the best practical technology to reduce pollution, waste, and energy consumption.
- The plan submitted represents the total scope of the project and that it show how and when successive stages of the project will be accomplished to achieve the total plan.
- Any proposed building program meets established standards and design criteria relative to permitted density, bulk and location of buildings.
- The project is based on competent marketing and feasibility studies that justify its economic viability.

Further, residential and recreational projects shall show that they can provide necessary on-site residential and commercial services such as stores, public water supply or centralized sewage treatment.

Implementation of Recommended Land Use Subdistricts

To implement the recommended land use subdistricts, this Plan must first be adopted. Thereafter, the Commission will define specified land use subdistricts and adopt standards for land uses within the subdistricts. The districts will be delineated on zoning maps which will be on file in county Registries of Deeds. The scheduled adoption of these regulations, standards, and maps will be as expeditious as possible, and will allow extensive opportunity for public review and discussion.

As mentioned above, the adoption of the Plan is but one step in a process that culminates with the adoption, in March 1977, of the first permanent zoning map for part of the jurisdiction. Thereafter, the entire jurisdiction will be rezoned in the same sequence as was done for the Interim Zoning. The recommended subdistricts are the basis for the permanent zoning. To move from those recommendations to the adoption of permanent subdistricts, a formalized procedure is mandated by law:

June, 1976 During June, 1976, a working draft of this document was reviewed by Regional Planning Agencies with an interest in the jurisdiction, by various State agencies, and by the public. A series of public hearings was held to obtain public response.

July - Aug. 1976 During July and early August the Commission revised the working draft of the Plan. It was submitted to the Governor for his approval in mid-August after adoption by the Board of Commissioners. The Plan was approved by the Governor on September 17, 1976.

Sept. - Nov. 1976 Regulations defining each new district and the standards prescribing permitted land uses within each district will be circulated for public review. Public hearings will be held on these standards in October/November of this year. Adoption of the standards is slated for late November, 1976. They will be effective immediately, however, the standards will, by law, require legislative approval or modification. If the Legislature fails to act, the standards will remain in force.

Jan. - March 1977 Staff mapping of permanent zoning districts will commence in mid-1976. The first block of new zones will be scheduled for public hearings in January, 1977 and adopted by March, 1977.

March, 1977 - May, 1979 Mapping for the other blocks within the jurisdiction will proceed as expeditiously as possible and will be completed not later than May, 1979.

Throughout this entire implementation program and beyond the Plan, the prime goal of the Commission will be to provide public information and assistance in understanding the new districting, the Plan, and its related regulatory provisions.

Recommended Permit Procedure Revisions

In addition to establishing new districts, it is recommended that the Commission's permit procedures be revised to increase efficiency. This can be achieved by giving more responsibility to the Commission's regional offices; these offices will be able to process routine permits more expeditiously than in Augusta. Efficiency can also be improved by instituting a one-stop permit process for all regulated development activity in the jurisdiction whereby an applicant need only deal with the Commission and not other State agencies.

Implementation of Permit Procedure Revisions

These recommendations will be implemented to the extent appropriations allow by reorganizing the Commission staff to achieve permanent regional area offices.

Regional Offices

The Commission's present regional offices provide valuable services to local citizens. If these functions could be expanded, the services provided landowners and builders in the jurisdiction would be improved and permit processing expedited. It is therefore recommended that:

- the regional Land Use Regulation offices be staffed on a permanent basis;
- the permanent staff in these offices be delegated authority to process all routine permits;
- the staff make recommendations concerning other non-routine permits and conduct on-site investigations and compliance inspections;
- the staff arrange a rotating schedule throughout its area so as to increase the availability of information and service to the public;
- the staff advise applicants on appeals procedures;
- the regional area office staff functions be coordinated from the central Development Review Division in Augusta.

Under this recommended organization, major and non-routine permit applications would be handled by the Development Review Division in Augusta. That division would also retain responsibility for handling zoning amendments and variances.

One-Stop Permits

A person who wishes to develop an area in the Land Use Regulation Commission's jurisdiction is often required to obtain several State permits. This may involve time-consuming delays and the duplication of information. To avoid these problems, the Commission recommends that in concert with other State agencies, a review be made of state permit procedures and regulations toward the end of establishing one-stop permitting within the jurisdiction.

The Commission recommends that all regulatory permit applications for the unorganized and deorganized towns and plantations be handled by the Commission. This will simplify the review process. It will also allow for all land use decisions to be made in the context of a comprehensive planning and districting system.

To implement the one-stop permit concept, the staff would immediately begin to review existing permit requirements to ascertain which permits require particular agency expertise and which involve straight-forward regulatory review. Upon consultation with the State agencies involved, a system would be devised to provide mandatory agency review where special expertise is required and discretionary review in other instances. Once such a one-stop program is defined, legislation necessary to its implementation would be submitted to the Legislature for action.

This process would allow persons intending development in the unorganized and deorganized areas to obtain only **one** permit before proceeding.

Further Recommended Action

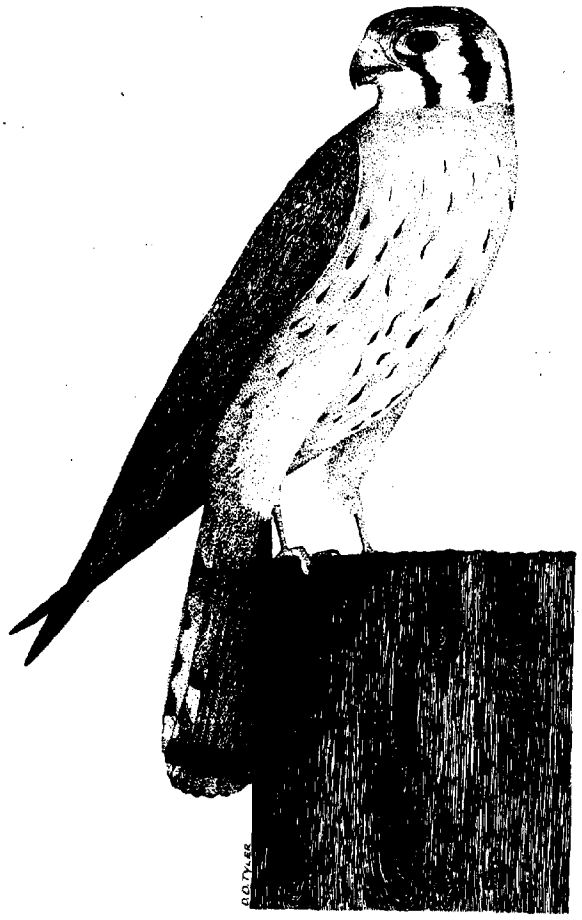
The experience of the Commission since 1971 has demonstrated the need for the following actions.

The Commission recommends:

- that a standardized State-wide citizen opinion survey be undertaken periodically to determine public attitudes towards land use in unorganized townships and plantations; such a survey would provide the agency with up-to-date information on issues that are

important to the public.

- that a similar survey poll landowners in the jurisdiction as to their attitudes and opinions.
- that programs of assistance to landowners, especially in remote parts of the jurisdiction be developed; the programs would include assistance with the required soil tests for permit applications.
- that programs providing planning assistance to plantations and other communities within the jurisdiction be developed.
- that informational and educational materials be developed and made available to individuals, groups and communities within the jurisdiction and throughout the State. These materials would contribute toward a better understanding of proper land use, planning, and existing regulations.
- that an inventory of current land use in the jurisdiction be completed.
- that mineral sites of both commercial and non-commercial value be evaluated to determine which need protection and which are suitable for exploration and possible extraction.
- that a development code or single manual that contains all information necessary to submit a subdivision, development, or forest operations permit be prepared.
- that the influence of forest management roads on developed patterns be evaluated. Such evaluation would become a basis for future policies concerning forest management roads.
- that positive incentives to maintain active farms on highly productive sites be developed.
- that criteria for identification of highly productive timberlands sites be developed. Landowners should be encouraged, through incentives, to use the criteria as a basis for rezoning these sites to Highly Productive Management Districts.
- that regional characteristics of the jurisdiction be examined for possible development of region-specific policies in future comprehensive plans.



Appendix A

Definitions

Agricultural Activities:

Land clearing, tilling, fertilizing, including spreading and disposal of manure and manure sludge, liming, planting, insect, weed and disease control, harvesting of cultivated crops, pasturing of livestock, and similar associated activities.

Agricultural Resources:

Areas which are or may be made suitable for farming or aquaculture.

Air Resources:

The atmosphere which provides the gases necessary for life and growth.

Aquaculture:

The cultivation of ocean plants or animals for human use or consumption; saltwater farming.

Aquifer:

A stratum or zone below the surface of the earth in bedrock or unconsolidated material which is capable of providing water for wells or springs.

Aquifer Recharge Area:

An area overlying or adjacent to an aquifer through which groundwater percolates and contributes to recharge of the system.

Assimilative Capacity:

The rate at which lakes respond to increase or decreases in pollution loading. Lakes that display little change in water quality to a pollution increase are said to have high assimilative capacity. Conversely, lakes that undergo large changes in water quality have low assimilative capacity for pollution loads. This is also sometimes referred to as lake vulnerability.

Bedrock:

That portion of the earth's crust which is consolidated and exposed at the surface or overlain by loose unconsolidated material and within reach of man's technology.

Borrow Pit:

An excavated area where material has been removed for use as fill at another location.

Buffer:

A designated area within a land use subdistrict and along the perimeter (or one or more edges) of a particular land use area, where all land use is regulated so as to screen that use and/or protect it. In most cases a buffer will be in the form of a well vegetated or landscaped strip of land that acts to ensure that a development activity fits harmoniously into the existing natural environment.

Building:

Any structure having a roof, partial roof supported by columns or walls used or intended to be used for the shelter or enclosure of persons, animals or objects regardless of the materials of which it is constructed.

Clearcutting:

Removal of virtually all the trees, large or small, in a stand in one cutting operation. This cutting method lays bare the treated area and leads to the establishment of an even-aged stand.

Coastal Resources:

All resource values and areas, identified in this plan, that are found in the Coastal Zone.

Coastal Zone:

Island Plantations, unorganized islands, the mainland townships of Edmunds and Trescott, and the ocean bottom to the territorial limits of Maine, except those areas within municipal boundaries.

Commercial Activities:

Of or connected with the buying and selling of goods or services or the provision of facilities or activities for a fee.

Conditional Use:

A land use other than that usually permitted in a designated land use district granted by the Commission because that use is considered to be generally compatible with the resources and other uses of that district but subject to conditions not normally applied to similar land uses. The conditions imposed are designed to protect adjacent land from loss of value which might occur if the newly permitted conditional use were allowed without restraint of any kind.

Development:

Any land use activity or activities directed toward using, reusing or rehabilitating air space, land, water or other natural resources.

Dissolved Oxygen Level:

The amount of oxygen dissolved in a water sample expressed in parts per million. About 3 to 5 parts per million is the lower limit needed for the support of fish life over a long period of time.

Dominant Use:

See Multiple Use.

Ecology:

The study of the relationship of plants and animals to their environment — that environment consisting of both other organisms and the physical world.

Energy Resources:

All sources of energy found in Maine which are currently in use or potentially available for use in energy production.

Erosion:

The detachment and movement of soil from the land surface by wind or water.

Erosion, Accelerated:

Culturally induced erosion in excess of geologic erosion.

Eutrophic:

See Trophic State.

Euthrophication:

The complex sequence of changes initiated by the enrichment of water bodies with nutrients. The first event in the sequence is an increased production and abundance of photo synthetic plants. This is followed by other changes that increase biological production at all levels of the food chain, including fish. Successional changes in species populations occur in the process.

Farm:

A tract of land constituting a management unit on which agricultural activities occur and including associated non-agricultural tracts.

Flood Prone Area:

Area adjacent to the channel of a river, stream, ocean, lake, or other body of surface water, which has been or may be covered by water. Generally areas that flood at least once every one-hundred years are defined as a flood prone.

Flowing Water:

Surface water within a stream channel that has a perceptible flow and is relatively permanent in nature. Such waters are commonly referred to as rivers, streams, and brooks.

Forest Management Activities:

Timber cruising and other forest resource evaluation activities, management planning activities, insect and disease control, timber stand improvement, pruning, timber harvesting and other forest harvesting, regeneration of forest stands, and other similar associated activities.

Groundwater:

Water within the earth that supplies wells and springs.

Historic Resources:

Sites, areas, districts, settlement patterns, natural features, structures, and objects associated with the history, tradition, or cultural heritage of state or local interest and of enough significance because of their characteristic, unusual, or symbolic qualities to merit preservation or restoration.

Home Occupations:

Work which has traditionally been carried on in the home (e.g. arts, crafts, and professional services) and which is capable of being conducted on a scale and in a manner which is unobjectionable in a residential area.

Great Pond:

The use of the word Great Pond in the context of the Recommended P-GP Protection Subdistrict shall mean standing bodies of water 10 acres or greater in size.

Housing:

Structural development for human habitation, including houses, camps, mobile homes, apartments, condominiums, groups of rooms or single family rooms occupied or intended for occupancy as separate living quarters.

Impoundment:

Any body of water created by man through the construction of a dam, usually with a head of water of at least two feet.

Industrial Activities:

Of or connected with the manufacture or assembly of goods or the extraction of minerals.

Inland Fisheries Resources:

Species of fish found in Maine's inland waters.

Land Management Road:

A route or tract consisting of a bed of exposed mineral soil, gravel, or other surfacing material constructed for or created by the repeated passage of motorized vehicles and used primarily for agricultural or forest management activities.

Land Use District:

Land Use District shall mean the area located within the boundaries of air, land or water deliniated vertically or horizontally by the Commission for distinct categories of use.

Mass Movement:

Downslope, unit movement of a portion of the land's surface, i.e. a single landslide or the gradual simultaneous, downhill movement of the whole mass of loose earth material on a slope face.

Mesotrophic:

See Trophic State.

Mineral Resources:

Metal (copper, iron and other ores) nonmetal (mineral stones, precious stones, top-soil, clay, sand, gravel and other borrow) and organic (peat) deposits from which a usable material can or may be extracted.

Minerals, Commercial Extraction

Removal of mineral resources with the intent of selling for profit.

Mountain Areas:

High elevation areas which, in general, have steep slopes, fragile soils, and a rigorous climate. The characteristics constitute severe limitations for many land use activities. In general mountain areas are visually dominant.

Multiple Use:

The judicious management of all the various resources for timber production, outdoor recreation, watershed protection, fish and wildlife protection, mineral extraction, and other private and public purposes.

MULTIPLE USE may involve: (1) different uses of adjacent subareas, (2) alternation through time of different uses on the same area, or (3) more than one use of an area at one time. In the first two methods, direct competition between uses is avoided by alternating them in space and time. Where spacially coincidental uses are involved at one time, conflicts between resource uses may occur, and the concept of such forms of multiple use is more correctly interpreted as a DOMINANT USE with secondary uses integrated insofar as they are compatible with the first and all uses are consistant with the major policies of this Plan.

Under multiple use management, some resources will be used for less than all of the possible uses and the various uses will be managed harmoniously so that the productivity of the land is not impaired.

Normal High Water Mark:

That line on the shores and banks of waters which is apparent because of the contiguous different character of the soil or the vegetation due to the prolonged

action of the water. Relative to vegetation changes from predominantly aquatic to predominantly terrestrial.

Noxious Use:

A use which, by the nature of the activity, is annoying, exhibiting smoke, steam, high noice levels, offensive odors, heavy traffic, etc. Such uses are incompatible with other development.

Oligotrophic:

See Trophic State.

Outdoor Recreation:

Leisure activity that is carried on outdoors and that requires space and resources, sometimes large quantities, for its enjoyment. Outdoor Recreation exists in the mind of the recreationist and takes place in a resource based environment involving use of land, water, scenery, wildlife, natural phenomena and archeological and historic sites.

Patterns of Settlement:

Those forms or relationships created by structural development activity as it occurs.

Permanent Districts and Standards:

Wherever used in this Plan in relation to districts or standards, Permanent shall mean "permanent" as used in the Statute, i.e. having full legal effect but subject to comprehensive review at the end of each 5 years following initial adoption. No change in permanent districts or standards shall be made unless there is substantial evidence that changes in conditions have made the present classification unreasonable.

Planned Development:

A large-scale development controlled by an entity of a single tract, or a number of contiguous parcels of land for the purpose of residential, commercial, or industrial use, (or some combination of these activities) planned in a manner that treats the areas as an entity from the outset. A development will only be considered a Planned Development if it is self-contained and self-sufficient and if its existence depends on a particular natural feature or location.

Prime Farmlands/Timberlands:

Lands best suited for producing food, feed forage, fiber, and oil seed crops, and available for these uses. Prime land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed according to scientific management methods.

Property Tax:

An annual levy upon an individual's personal and real property based on the value of the property.

Public Services:

Those services related to filling the need for water supply, waste disposal, fire and police protection, public utilities, hospital and health services, transportation and education.

Recreational Activities:

Leisure time activities which make use of land resources, i.e. mountains, lakes, beaches, forests, etc.

Recreational Activities, Non-intensive or Primitive:

Leisure time activities requiring a minimum of support facilities, the absence of permanent structures, and a relatively low concentration of use.

Recreational Facilities:

Forms of development that are essential to conduct particular recreational activities, eg., ski lifts, golf courses, sporting camps, hiking trails, and campsites. Also

included are facilities which support, but are not essential to, the performance of the recreational activity, eg., access roads, parking lots and lean-to's.

Recreational Resources:

Natural areas, such as bodies of water, shorelands, mountains, forests, fish and wildlife, and areas of historic, scenic or scientific interest, which provide a means of refreshment and diversion to people during leisure-time activity.

Remote Ponds:

Waters and their immediate environment which retain their natural character and influences, where permanent effects of man's use of the land and water resources are unnoticeable.

Routine Permits:

Commission permits for all types of activities, except zoning amendments and variances, which involve no new or first-time interpretation by the Staff of the Statute, standards, rules and regulations and for which a decision of the Commission exists as precedent.

Seasonal Sawmill:

Any mill that
(1) does custom sawing only; or
(2) saws only wood cut by the mill owner-operator; or
(3) conducts sawing operations less than a total of four months out of the year.

Scenic Considerations:

Considerations to provide for fitting proposed activity harmoniously into the natural environment in order to assure there will be no adverse effects on existing uses, scenic beauty, and the natural and historic resources in the area.

Scenic Resources:

The visual quality and character of an area.

Scientific Resource:

An area containing unique or rare landforms, water resources, vegetation, animals or archeological sites which are of special interest for scientific research or educational purposes.

Shoreland, Immediate Area:

That part of the shoreland influence area that is immediately landward of the normal high water mark, and in which land use activities will significantly influence the use and quality of surface water. This area is generally considered to be 250 feet or more landward from the normal high water mark.

Shoreland Influence Area:

Areas landward of a normal high water mark in which certain land use activities will influence the use and water quality of the surface water. The depth of an influence area can vary from a uniform strip to the boundaries of the watershed because of differences in natural resources character and land use activity.

Siltation:

The addition to water of fragments of rock or organic matter, giving water a clouded or muddy appearance.

Site Plan Review:

A procedure for evaluating proposed development or conservation projects based on the quality of and/or concept incorporated into the proposal and designed to meet general performance standards for such projects. Site plan review should allow more flexibility and innovation in development or conservation proposals than traditional zoning regulations.

Slope Precipitous or Steep:

An excessively steep slope. One on which it becomes hazardous to perform operations. Precipitous slopes have a high potential for accelerated erosion.

Soil:

The collection of natural bodies occupying portions of the earth's surface that support plants and that have properties due to the integrated effect of climate and living matter acting upon parent material (weathering) over periods of time.

Soil, Fragile:

A fragile soil is one which, if disturbed, or denuded, will easily erode, usually because of its texture and slope.

Soils, Floodplain:

Those soils created as a result of recurrent flooding, found adjacent to streams or rivers.

Soils, Very Poor:

The soil is not suited to the proposed land use because it has one or more properties, pertinent to that use, that are so restrictive that development is impractical. The soil conditions may be partially corrected with special engineering design, construction techniques, and management, but development costs and/or maintenance costs may be prohibitive because of soil conditions. Development of soils with a very poor rating for certain uses will have a very significant impact on the environment of that area.

Standing Water:

A body of surface water that has no perceptible flow and is relatively permanent in nature, commonly referred to as man made or natural lakes or ponds.

Structure:

Anything constructed or erected with a fixed location on or in the ground, or attached to something having a fixed location on or in the ground, including, but not limited to, buildings, mobile homes, walls, fences, billboards, signs, piers and floats.

Structure, Accessory:

A structure subordinate to a permitted development, which is incidental to the use of that development.

Structure, Non-conforming:

A structure, lawfully existing at the time of adoption of district regulations or subsequent amendment made thereto, that does not conform to the district regulations.

Subdivision:

A division of an existing parcel of land into 3 or more parcels or lots, within any 5-year period, whether this division is accomplished by platting of the land for immediate or future sale, or by a sale of the land by metes and bounds or by leasing.

No sale or leasing of any lot or parcel shall be considered a subdivision if such lot or parcel is not less than 40 acres in size except where the intent of such conveyance is to avoid the objectives of this statute.

Surface Waters:

Bodies of standing, flowing and tidal waters on the earth's surface. These waters would include lakes, ponds, rivers, streams and oceans.

Surficial Materials:

That portion of the earth's crust which is unconsolidated and located on top of the underlying bedrock.

Sustained Yield:

The achievement and maintenance in perpetuity of a high level of regular periodic output of renewable resources (trees) without impairment of the productivity of the land.

Tidal Waters:

All waters or portions thereof which cus-

tomarily ebb and flow as the result of tidal action.

Timber Harvesting:

The cutting and removal of trees from their growing site, and the attendant operation of cutting and skidding machinery but not the construction or creation of land management roads.

Timber Resources:

Standing growths of forest trees which provide raw materials for forest products.

Transportation:

The movement of people and materials (excluding the movement of materials through pipelines).

Transportation:

The movement of people and materials (excluding the movement of materials through pipelines).

Trophic State:

Characterization of a body of water in terms of position on a scale ranging from oligotrophic to eutrophic. Oligotrophic — low biological productivity, clear and deep water which are well supplied with oxygen. Mesotrophic — moderately well supplied with plant nutrients and support moderate plant growth. Eutrophic — high biological activity, turbid and shallow waters and deepest waters exhibit reduced levels of oxygen.

Unorganized and Deorganized Areas:

All areas located within the jurisdiction of the State of Maine, except areas located within organized Cities and Towns, and Indian Reservations.

Watershed, District:

The area immediately adjacent to a lake, pond, or flowing water in which activities directly affect that water body.

Waste Disposal:

The treatment and discharge of municipal and industrial sewage, agricultural wastes, and solid waste.

Wetlands, Coastal:

All tidal and subtidal lands including all areas below any identifiable debris line left by tidal action, all areas with vegetation present that is tolerant of salt water and occurs primarily in a salt water habitat, and any swamp, marsh, bog, beach, flat or other contiguous lowland which is subject to tidal action or normal storm flowage at any time excepting periods of maximum storm activity.

Wetlands, Inland:

Areas enclosed by the normal high water mark of non-tidal flowing waters, non-tidal standing waters, and stream channels occupied by non-tidal waters, or areas otherwise identified on the basis of soils, vegetation or other criteria as inland wetlands including but not limited to swamps, marshes or bogs.

Appendix B

Citizen Questionnaire

As part of its public review process, the Commission distributed questionnaires concerning land use regulation, the Draft Comprehensive Land Use Plan, and specific policies and proposals embodied in the Plan. Space was also provided for comments on problems encountered by the respondents in previous dealings with the Commission and for other general comments. The questionnaires were handed out with copies of the Draft Plan at the Public Hearings. Approximately 300 questionnaires were given out; 30 were answered and returned, many with comments.

A copy of the questionnaire with response totals for each question is found on the following page. Basically, the responses were these:

- 25 out of 30 respondents (83.3%) favor State regulation of land use in the unorganized areas of Maine. (Question #1)
- Nearly all (96 to 100%) of those who support State regulation also support the Major Policy Statements of the Plan and the concepts of regional offices and one-stop permits. (Questions #1, 3, 4)
- A substantial majority (80 to 84%) of those who support State regulation also felt that the Protection — Shoreland Subdistrict, the Management — Natural Character Subdistrict, and the three Development Districts were sound and reasonable. (Question #5, last three parts)
- A majority (64 to 68%) of those respondents who support State regulation were in general agreement with the Natural Resource and Development Policies and felt that the recommended new districts were adequate to achieve the policies of the Plan. (Questions #6 and #5, first part)
- A large number of the respondents to Questions #5 and 6 who expressed no opinions or who felt the Natural Resource and Development Policies and the new districts were inadequate were concerned that the Fish and Wildlife Protection Subdistrict outlined in the Draft Plan should be expanded from protection of habitats of unique or endangered species to habitats of all wildlife important to Maine citizens, particularly white-tailed deer. The Commission has responded to this criticism by changing the Plan to include all important wildlife habitats.

Comprehensive Land Use Plan Questionnaire and Comments

Dear Citizen:

The Commission wishes to obtain constructive comments on its draft Comprehensive Land Use Plan. We would appreciate receiving your response to the following questions concerning the Plan as soon as possible. Please feel free to make other general comments about its content or format in the space provided.

Please mail your answers and comments to the Commission after folding according to the instructions. No postage is necessary.

Thank you.

Kenneth G. Stratton,
Director

	No Opinion	Yes	No
1. Are you in favor of *State regulations* to guide land use and protect natural resources in the plantations and unorganized townships of the state?	0 ☐	25 ☐	5 ☐
2. In general, do you support the *Major Policy Statements* on pages 1-3 and 1-4 of the Plan? If your answer is No, which Statements do you disagree with and why.	0 ☐	24 ☐	6 ☐
3. Do you feel that the Commission can serve the public better by establishing *permanent regional offices* with staff to handle routine permit applications? (The central office in Augusta would remain.) (Refer to page 7-22)	1 ☐	25 ☐	4 ☐
4. Are you in favor of legislation that would establish a *one stop permit* procedure? (Refer to page 7-23)	2 ☐	24 ☐	4 ☐
5. The table on page 1-5 shows recommended *new districts* designed to help achieve the Major Policies. The districts are described in full on pages 7-1 through 7-19. In general, do you think that:			
— The new districts achieve the objectives and policies of the Plan?	4 ☐	17 ☐	9 ☐
— The Protection-Shoreland District (P-SL) establishes a reasonable procedure for determining the amount of development that should be permitted on lakes and ponds that are suitable for development?	4 ☐	21 ☐	5 ☐
— The concept of a Management-Natural Character Districts (M-NC) is basically sound and represents a reasonable means of conserving the "wild" character of some large areas?	1 ☐	20 ☐	9 ☐
— The three Development Districts proposed adequately serve to provide for future residential, commercial and industrial growth?	4 ☐	20 ☐	6 ☐
6. In reviewing the *Natural Resource and Development Policies* on pages 6-5 through 6-11 are you in general agreement with their aims? If not please state which you disagree with (give page number and paragraph reference: for example 6-9, F.3).	2 ☐	16 ☐	9 ☐
7. If you have dealt with the Land Use Regulation Commission, is there anything you would like to bring to our attention concerning permit application procedures, rules and regulations, the Interim Standards, etc.?			

Appendix C

Land Use Regulation Publications

- Building in the Wildlands of Maine
- Subdividing in the Wildlands of Maine
- A Manual for Land Use Planning
- A Legislative History and Analysis of the Land Use Regulation Law in Maine
- Lessees in the Unorganized Townships of Maine
- An Analysis of the Attitudes of Residents Toward Land Use in Maine's Unorganized Areas
- Identified Needs for the Land Use Planning Process
- Revised Statutes Annotated, Title 12, Chapter 206-A, Land Use Regulation
- Maine Land Use Regulation Commission, Rules and Regulations
  - Chapter 1 General Provisions
  - Chapter 2 Standards
  - Chapter 3 Delegation to Staff
  - Chapter 4 Rules of Practice
  - Chapter 5 Rules for the Conduct of Public Hearings
  - Chapter 6 Sewage Regulations
  - Chapter 7 Regulations for Utilities
  - Chapter 8 Variances
- Coastal Islands Inventory

Following is a list of Resource Policies papers compiled by the Planning Division and other groups. They are on file at the Augusta Office and available for public viewing during office hours.

- Agricultural Resources
- Development
- Flood Prone Areas
- High Mountain Areas
- Historic Resources
- Housing
- Inland Fisheries Resources
- Property Taxation
- Outdoor Recreation
- Scenic Resources and Considerations
- Ski Resorts
- Soil Resources
- Surface Waters and Associated Shoreland Influence Areas
- Timber Resources
- Transportation
- Wetlands
- Wildlife Resources

Following is a list of publications used, by reference, in Land Use Regulation Commission's development review process:

"Maine Guidelines for Manure Sludge Disposal on Land," Misc. Report 1 and 2, Life Science and Agricultural Experiment Station, Cooperative Extension Service and the Maine Soil and Water Conservation Commission, July 1972.

"Maine Guidelines for Septic Tank Sludge Disposal on Land," Misc. Report 155, Life Science and Agricultural Experiment Station, Cooperative Extension Service and the Maine Soil and Water Conservation Commission.

"Permanent Logging Roads for Better Woodlot Management," U.S. Department of Agriculture, Forest Service, Upper Darby, PA., 1973.

"Soil Suitability Guide for Land Use Planning in Maine," Misc. Publication 667, College of Life Science and Agriculture and Maine Agriculture Experiment Station, February 1975.

State Plumbing Code, Part II, State of Maine, adopted by the Department of Health and Welfare, April, 1975.

Solid Waste Management Regulations, Maine Department of Environmental Protection.

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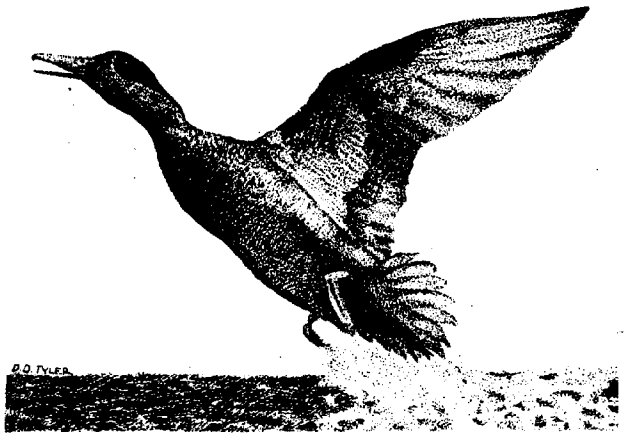

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